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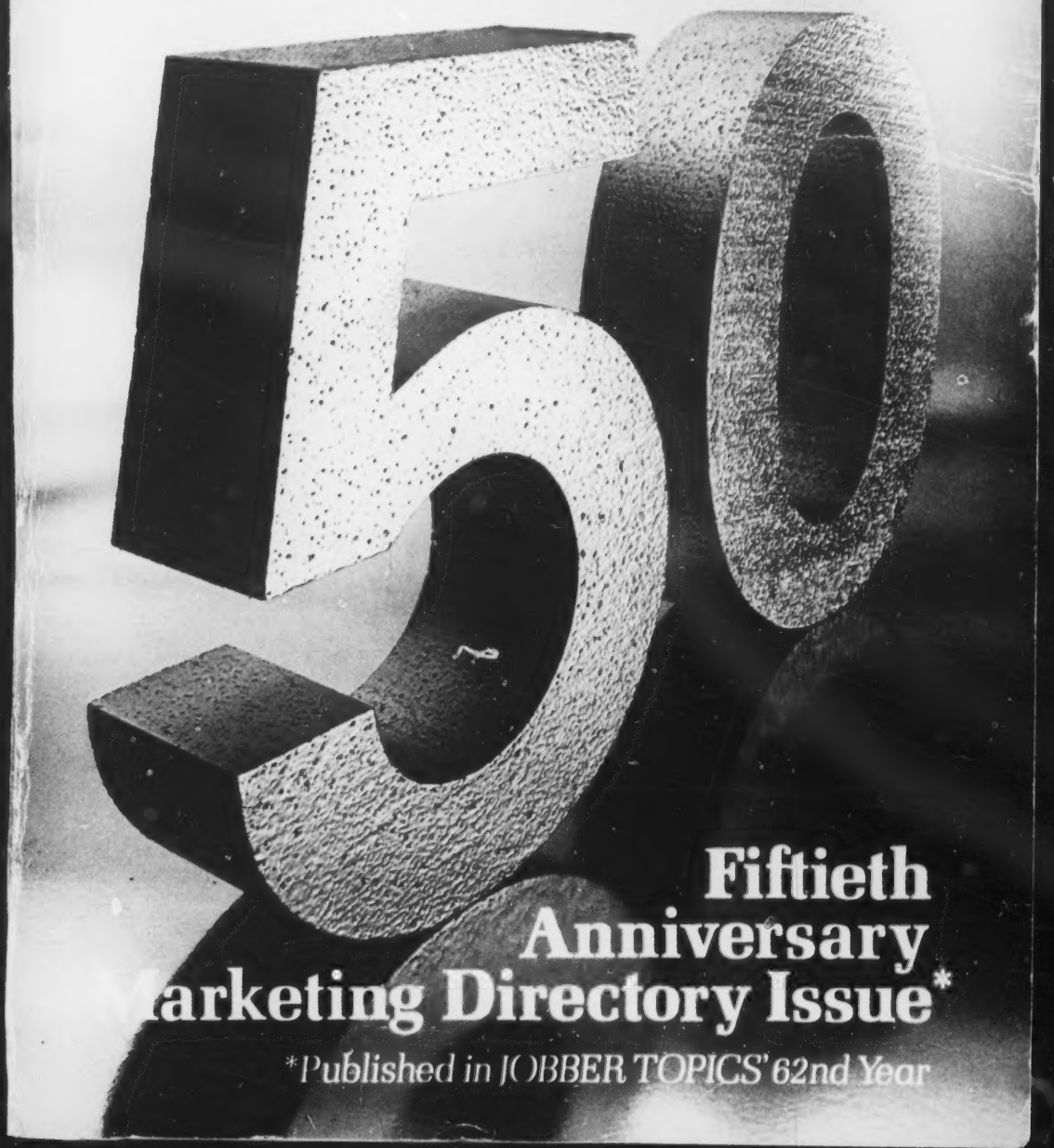
Jobber® topics

AN IRVING-CLOUD PUBLICATION

SERVING WHOLESALE DISTRIBUTION IN THE AUTOMOTIVE AFTERMARKET FOR SIXTY-TWO YEARS



Fiftieth Anniversary Marketing Directory Issue*

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Jobber topics®

AN IRVING-CLOUD PUBLICATION

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contents

FOLLOW THE SIGNS

- Of direct interest to all **EXECUTIVES**
- "Must" reading for outside **SALESMEN**
- Not to be missed by **COUNTERMEN**
- For those concerned with **MACHINE SHOP**
- For those interested in **RETAIL SALES**

FEATURES

E S C M R	ECONOMIC FORECAST 'NOT TOO SHABBY'	18
E S C M R	TRUCKS MAY SCORE 2ND BEST YEAR	44
E S C M R	RECESSION TOUGH BUT 'PATIENT' SURVIVING	57
E S C M R	AFTERMARKET MOVING TO HIGHER GROUND	60
E S C M R	DO YOU HAVE A BADGE OF RECOGNITION?	66
E S C M R	WARRANTY POT STILL BOILS IN CALIFORNIA	70
E S C M R	INSTALL SHOP? NEW OWNERS SAY 'GO FOR IT'	74
E S C M R	PROFITS, PERILS OF SHOPPING CENTER STORES	76
E S C M R	JOBBER TOPICS' 'STARS' TELL OF IMPACT	78
E S C M R	IN CAPITAL, WAITING GAME GOES ON AND ON	82
E S C M R	AUTOMAKING 'REVVED UP'; PLANTS REOPENED	86
E S C M R	LOOKING THROUGH 1984'S 'PICTURE WINDOW'	90

DEPARTMENTS

20 Years Ago	10	Clinic-ally Speaking	85
How's Business	16	What's New	102
Cloud-Bursts	26	Sales Aids	124
Coming Events	30	Men on the Move	140
News Panorama	35	Manufacturers News	160
Detroit Digest	40	Association News	162
Noted in Washington	49	Jobberwise & Otherwise	182
Entree	54	Advertisers Index	230

Study Shows Optimism; Aftermarket Moving To Higher Ground

Sixty percent of panel report improved dollars sales. Twenty-nine percent say their cash position is better . . .

By BILL ELLIS
Managing Editor

Consumer Price Index
The Prime Rate
Gross National Product
Housing Starts
Retail Sales
Rate of Unemployment
Etc., Etc., Etc.

Everyone who has ever picked up a newspaper or turned on a TV or radio recognizes the above as the indexes by which a sometimes nervous public watches the U.S. economy.

Ellis

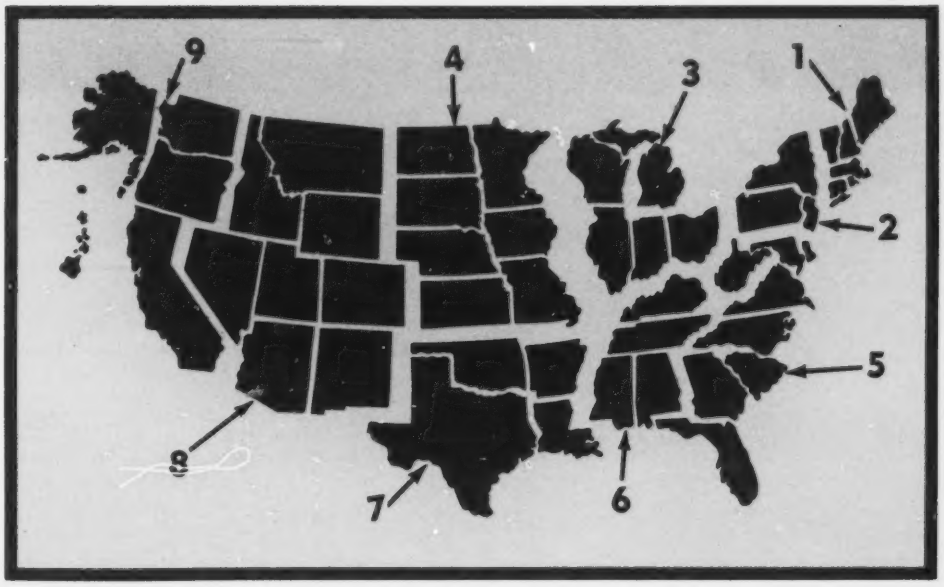
At JOBBER TOPICS, we too have an index. It's our "How's Business" survey. Monthly, throughout the year, we poll our "How's Business" panel to produce the page that appears at the front of each issue. Then, annually, we quiz our respondents in a little greater depth. The results of that survey form the basis for this "stretched-out" How's Business report that appears each year in the July issue of JOBBER TOPICS.

What we want to learn from our panel, and what—we assume—our readers want to learn, is how things stand as regards six basic matters: dollars sales; unit sales; collections; local markets; cash position, and local economic conditions. To see which direction these indexes are moving, we ask panelists to compare the first two months of the current year with the first two of the past year. We also welcome marginal comments from our panel.

Bird's-eye view of aftermarket

To put feedback from the study into meaningful form, we sort it out two different ways. We prepare national or "All Regions" figures which show a bird's-eye view of the aftermarket across the country. Then we also prepare breakdown figures which show a *regional* view of the aftermarket, according to nine geographic areas.

In this article, taking full advantage of our survey information, we will treat first the national data then the regional data, going from one region to the next. As always, we strive to keep the text as short as possible while being fully informative. Readers, for this reason, are advised to study the accompanying boxes, which pro-



vide finer sifting of the information.

Nationally, according to computed returns from 210 respondents, the aftermarket looks pretty good. Having sloughed off the drag of recession, and being pump-primed by spurts in retail and auto sales, the industry is moving to high ground it has not enjoyed for some time. Granted, there are disturbing prospects of higher interest rates, more taxes, renewed inflation and other "bogies." But, for the present, and for the coming quarters of the current year, things look rather hopeful.

In dollar sales, the first item in our survey questionnaire, 60 percent of our jobbers said they were up—meaning the first two months of '84 exceeded the corresponding months of '83. Another 22.4 percent said sales were the same, unchanged from a year ago. That left 17.6 percent who reported them down.

If up or down, to what degree, we wanted to know. Answers to that question showed the average rise was 14.1 percent, and median rise 11.0 percent. And the drop? There the average was 11.5 percent and median 10.01 percent.

In unit sales—units of merchandise apart from their cash value—the picture was also rosy, but more subdued. Half (50.9 percent) said unit sales were up, while one third (33.9 percent) reported them unchanged. The rest, 15.6 percent, said they were down. The degree up or down, for the median jobber, was the same: 10 percent.

Cash position improved

Collections, when compared to our 1983 "How's Business" study, were improved, but only marginally. Seventeen percent (plus) said they were up while 27.3 percent claimed they were down. Fifty five percent (plus) reported them the same.

The degree of up or down, for the median jobber, was the same as sales: 10 percent.

The jobbers' cash position, of which collections are a key ingredient, is markedly improved. In answer to the survey question, 29 percent said their position was better, 56 percent claimed it was the same, and 15

Compare the first two months of 1984 with the first two months of 1983.

(Percent total respondents)

Unit Sales	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Up	83.3	44.1	58.1	67.9	41.2	40.0	25.0	84.6	22.2	50.5
Down	0.0	20.6	12.9	0.0	23.5	13.3	37.5	7.7	11.1	15.6
Same	16.7	35.3	29.0	32.1	35.3	46.7	37.5	7.7	66.7	33.9
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average percent up	7.5	12.9	11.7	10.5	12.1	14.5	14.3	13.2	n.a.	12.0
Median percent up	7.5	10.0	9.0	10.0	10.0	12.5	10.0	10.0	n.a.	10.0
Average percent down	n.a.	8.3	7.7	n.a.	6.5	8.5	17.7	n.a.	n.a.	10.8
Median percent down	n.a.	10.0	10.0	n.a.	7.0	8.5	10.0	n.a.	n.a.	10.0

percent said it was worse.

Shifting market patterns were also a focus of our study. To jobbers reporting improved sales, we asked, "Which class of trade contributed most to your increase?" In reply, 23.3 percent said repair shops; 11.4 percent mentioned service stations; 9.5 percent said car dealers; and 7.1 percent reported do-it-yourselfers.

'Walk' through the regions

Health-wise, parts stores are often heavily influenced by their local economies. Thus the final survey question which asked "Are economic conditions in your area improving, getting worse, or about the same (compared to early 1983)?" "Improving," said 38.3 percent; "getting worse," lamented 11.5 percent; and "about the same," offered 50.2 percent.

That's how the country looks from coast to coast and border to border. Now let's come down to earth, as it were, and take a statistical walk through the regions. Altogether, we will tavel through nine regions, the same as those used by the Government for its census tabulations. Again, we will be brief, only touching on those readings at strong departure from other regions or the U.S. as a whole.

The regions and states included in each are:

Region 1 (New England): CT, ME, MA, NH, RI and VT

Comparing the first two months of 1984 with the first two of 1983, is your cash position better, worse, or about the same?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Better	25.0	32.5	28.2	29.0	25.7	17.7	16.7	57.1	33.3	29.0
Worse	0.0	12.5	25.8	9.7	14.3	23.5	11.1	14.3	6.3	15.0
Same	75.0	55.0	46.2	61.3	60.0	58.8	72.2	28.6	58.4	56.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Compare the first two months of 1984 with the first two months of 1983.

(Percent total respondents)

Dollar Sales	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Up	87.5	52.8	64.1	77.4	51.4	52.9	38.9	85.7	41.7	60.0
Down	0.0	19.4	18.0	6.5	25.7	17.7	38.9	7.2	8.3	17.6
Same	12.5	27.8	17.9	16.1	22.9	29.4	22.2	7.1	50.0	22.4
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average percent up	10.0	15.8	15.5	13.9	11.8	16.0	13.6	15.8	10.7	14.1
Median percent up	10.0	11.0	15.0	10.0	10.0	12.0	10.0	15.0	7.6	11.0
Average percent down	n.a.	8.3	13.4	n.a.	7.6	8.7	17.9	n.a.	n.a.	11.5
Median percent down	n.a.	10.0	10.0	n.a.	7.5	5.0	10.0	n.a.	n.a.	10.0

Region 2 (Middle Atlantic): NJ, NY and PA

Region 3 (East North Central): IL, IN, MI, OH and WI

Region 4 (West North Central): IA, KS, MN, MO, NE, ND and SD

Region 5 (South Atlantic): DE, DC, FL, GA, MD, NC, SC, VA and WV

Region 6 (East South Central): AL, KY, MS and TN

Region 7 (West South Central): AR, LA, OK and TX

Region 8 (Mountain): AZ, CO, ID, MT, NV, NM, UT and WY

Region 9 (Pacific): AK, CA, HI, OR and WA

Now, let's begin our regional analysis.

Region 1 (New England)—Compared to other regions, New England was a place of extremes, both good and bad. More jobbers reported higher dollar sales and improved collections: 87.5 percent and 25.0 percent, respectively. At the same time, however, fewer (25.0 percent) reported local economic conditions were improving.

When it came to giving credit for improved sales, 37.5 percent of the jobbers named service stations. That was twice the number citing stations in any other region. None mentioned car dealers and only 12.5 listed repair shops.

Region 2 (Middle Atlantic)—A Pennsylvania jobber reminded us the "recession" still goes on for many in this country. Many jobless coal mine and steel mill workers are looking for credit, he said, and thus creating "a tough situation." Collections in Region 2 would seem to bear this out: Only 5.7 percent of the jobbers, fewer than elsewhere in the nation, said collections were improved.

Dollar and unit sales readings were lower than the national figure, though the cash position figure was higher. Only 27.8 percent saw economic conditions improving.

Region 3 (East North Central)—This industrial midwest section, after suffering severe unemployment, would now seem to be recovering—lustily. Of the survey sampling, 64.1 percent said sales were up and 23.1 percent said collections were up. Most remarkably, 46.2 percent reported local conditions improving.

Region 4 (West North Central)—Although the economic outlook was not exceptionally high in this plains-state region, current dollar and unit sales experience was the third highest in the nation. Twenty-nine

If sales were up, which class of trade contributed most to your increase?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Repair shops	12.5	25.0	20.5	22.6	25.7	17.7	27.8	50.0	8.3	23.3
Service stations	37.5	16.7	10.3	9.7	11.4	11.8	0.0	14.3	0.0	11.4
Car dealers	0.0	13.9	7.7	19.4	5.7	5.9	0.0	21.4	0.0	9.5
Do-it-yourself business	12.5	5.6	12.8	3.2	2.9	5.9	5.6	0.0	25.0	7.1
Other	0.0	2.8	0.0	0.0	14.3	0.0	0.0	7.1	25.0	4.8
Percent reporting sales up	87.5	52.8	64.1	77.4	51.4	52.9	38.9	85.7	41.7	60.0
Percent reporting sales down	0.0	19.4	18.0	6.5	25.7	17.7	38.9	7.2	8.3	17.6

*Totals over 100 percent due to multiple mentions

percent said their cash position was better, exactly the same as the national number.

Region 5 (South Atlantic)—In this eight-state region dollar sales, unit sales, collections, and cash position all stood lower than the national figures, though not dramatically lower. Ahead, the prospects looked brighter. Forty four percent (vs. the national figure of 38.3 percent) said times were getting better.

A Florida jobber reminded us anew that conditions at the local level often overrule the pat pronouncements of the statistician. For nearly three years, he said, construction of a mass transit system had made a mess of his community. Walk-in trade had dropped off "because no one wants to come into this area. Hopefully," he added, "we can survive this mess."

Region 6 (East South Central)—Reading the charts for these four states, one finds an interesting anomally: strong collection experience (second best in the country), but weak cash position (next to the *lowest* in the country). Just under 53 percent reported improved dollar sales.

Comparing the first two months of 1984 with the first two of 1983, are economic conditions in your area improving, getting worse, or about the same?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Improving	25.0	27.8	46.2	29.0	44.1	35.3	33.3	64.3	41.7	38.3
Getting worse	25.0	16.7	12.8	3.2	5.9	5.9	22.2	7.1	16.7	11.5
About the same	50.0	55.5	41.0	67.8	50.0	58.8	44.5	28.6	41.6	50.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Compare the first two months of 1984 with the first two months of 1983.

(Percent total respondents)

Collections	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Up	25.0	5.7	23.1	19.4	14.3	23.5	16.7	21.4	16.7	17.2
Down	37.5	20.0	23.1	29.0	22.9	47.1	33.3	21.4	33.3	27.3
Same	37.5	74.3	53.8	51.6	62.8	29.4	50.0	57.2	50.0	55.5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average percent up	n.a.	n.a.	9-9	8.0	18.3	12.5	n.a.	n.a.	n.a.	11.3
Median percent up	n.a.	n.a.	8.0	5.5	15.0	10.0	n.a.	n.a.	n.a.	10.0
Average percent down	11.7	10.3	15.7	9.7	7.2	12.8	18.3	14.3	14.0	12.4
Median percent down	10.0	6.0	10.0	10.0	8.0	10.0	10.0	15.0	20.0	10.0

Region 7 (West South Central)—A Texas jobber seemed to say it all, for not only his state but the other three in his region. He wrote: "This is a petroleum and agricultural area. Farmers couldn't work due to bad weather and the petroleum industry is still in a slump here . . . Our parts and shop sales have been down badly." Stark underscoring of that jobber's comment showed up in the How's Business charts. Only 38.9 percent of the jobbers said sales were up, a low unmatched by any other region. The "up" report on unit sales (25.0 percent) was correspondingly low, as was the cash position report at 16.7 percent.

The jobber quoted did allow that "(Oil) drilling activity is very slowly starting back up." This may explain why one third of the panel, a number exceeding three other regions, reported improved local economies.

Region 8 (Mountain)—When Region 8 figures for the current study are put alongside those for last year's study, the disparity is breathtaking. The "up" report for dollar sales advances from 38.3 percent to 85.7 percent; improved collections from 2.1 percent to 21.4 percent; better cash position from 8.7 percent to 57.1 percent; and improving economic outlook from 21.7 percent to 64.3 percent. Clearly there's a boom going on in this area, as population trends tend to confirm.

Region 9 (Pacific)—Region 9 reports brought complaints from two jobbers of WDs selling direct to car dealers and service stations. One of the two lamented invasion of the market by "drug stores, department stores and supermarkets." Competition from non-traditionals, along with some softening in electronics, may indeed be why this region shows up only moderately well in the charts. Only 41.7 percent said their dollar sales were better and 16.7 percent said their collections were up. The future looked brighter. Nearly 42 percent said local economic conditions were improving.

HISTORICALLY, replacement parts manufacturers have been considered good recession resistant investments. People that couldn't afford a new car generally fixed up their old car. By Forbes *estimations, annual increases in repair spending were slim during the recent recession. Repair spending grew 4.7 percent annually from $66.9 billion in 1979 to $76.8 billion in 1982.*

AUTOMOTIVE STATISTICS

1984

AUTOMOTIVE STATISTICS

INDEX TO THE STATISTICAL SECTION

Automobiles (See Cars)

Automotive Heavy Duty
Distributor
Productivity of Staff 37-S
Sales, Profit, Asset
Measures 36-S

Automotive Manufacturers
Financial Ranking 34-S, 35-S
MEMA Members' Sales
Forecast 33-S
Number of 5-S

Automotive Production
Rebuilders, Number of 5-S

Automotive Repair
Facilities,
Number of 5-S

Automotive Repair Shops
Number of 5-S
Parts, Service Sales 5-S

Automotive Service Industry
Scope 5-S
Total Service &
Parts Market 5-S

Automotive Warehouse
Distributors
Average Profit, Turnover,
Sales Per Employee 32-S
Balance Sheet 31-S
Costs as Percentage
of Sales 30-S
MEMA Profile of
Average WD 28-S
Performance Measures 27-S

Automotive Wholesalers
Asset Management 15-S
Balance Sheet 10-S
Canadian Wholesalers 24-S
Costs, Income, Profit
as Percent of Sales 8-S
Employees, Number
by Category 18-S
Employees, Productivity
Measures 15-S
Expense Item Statement 14-S
Failures by Year 45-S
Key Business Ratios 15-S
Leading Merchandise
Items 11-S
Leading Product
Groupings 12-S
Major Size Wholesalers 4-S
MEMA's "Composite"
Wholesaler 22-S
Operating Costs
as Percent of
Gross Margin 12-S
Outlets by State 6-S
Payroll Costs as
Percent of Sales 11-S
Profile of Median
Wholesaler 9-S
Profit Ratios 10-S
Sales by Product
Category 23-S
Shop Profit as Percent
of Labor Sales 16-S
Unit Sales of Selected
Product Lines 21-S
Vehicle Registrations
Per Outlet 7-S
Where Jobbers Buy 38-S
Where Jobbers Are
Located 25-S
Where Selected Items
Are Sold 18-S

Batteries, Factory
Shipments 14-S

Buses
Average Miles Per Year 39-S
Registration by State 29-S

Canadian Automotive
Industry
Sales of Wholesalers 24-S
Trade in Products
With U.S. 26-S
Vehicle Registration 24-S

Car Dealers
Number by State 7-S
Number by Year 20-S
Parts & Service Sales 45-S

Cars
Annual Factory Sales 36-S
Average Cost to Own And Operate 44-S
Average Miles Per Year 39-S
Imported Car Sales 39-S
Production by Make 40-S, 41-S
Production by Model Year 33-S
Production Milestones 31-S
Registration by State 6-S
Scrappage 47-S

Fleets
Factors Influencing Purchasing Decisions 32-S
Where Fleets Purchase Replacement Parts 26-S

Heavy Duty Distributors (See Automotive Heavy Duty Distributors)

Heavy Duty Equipment
Where Heavy Duty Managers Buy Replacement Parts 37-S

Jobbers (See Automotive Wholesalers)

Machine Shops—
Profit as a Percent Of Labor Sales 16-S

Manufacturers (See Automotive Manufacturers)

Mechanic Testing and Certification
Breakdown by Employer 17-S
Eleven Year Totals 24-S

PBE Wholesalers 13-S

Remanufacturers (See Automotive Production Rebuilders)

Service Stations
Dealers by State 7-S
Parts & Service Sales 5-S

TBA Dealers
Number of 5-S
Parts & Service Sales 5-S

Tires, Factory Shipments 18-S, 19-S

Trade Associations
State & Regional, Size 16-S
State & Regional, Geographic Distribution of Members 17-S

Trade Shows
Big "I" Show Statistics 42-S
Regional Show Statistics 43-S

Trailers
Registration by State 48-S

Truck Dealers
Number by State 7-S

Trucks
Average Miles Per Year 39-S
Production Milestones 32-S
Registration by State 6-S
Registration by State, Truck Tractors, Light Trucks and Trailers 48-S
Scrappage 48-S

Vehicle Production
Milestones 44-S
Twelve World Leaders 25-S

Warehouse Distributors (See Automotive Warehouse Dist.)

Wholesalers (See Automotive Wholesalers

Automotive Wholesalers Among Largest in 1983

Based on Number of Branch Stores and Outside Salesmen

	Branches	Salesmen	Shops
Acme Auto Supply, Inc., West Hartford, CN	28	10	1
Arnold Motor Supply, Spencer, IA	19	46	19
Automotive Supply Co., Altoona, PA	26	28	5
Automotive Supply Co., Inc., Appleton, WI	11	15	12
Barnes Motor & Parts Co., Inc., Wilson, NC	24	34	6
*Big A Auto Parts, Inc., North Hollywood, CA	18	14	9
*Big A Auto Parts, Inc., Reading, PA	16	16	3
*Big A Auto Parts, Lincoln, NE	11	13	9
Blankenship & Co., Inc., E., Marion, IL	16	16	5
Brooks Auto Parts, Inc., Douglas, GA	51	18	7
Burdman Auto Parts, Inc., J., Kirksville, MO	29	28	1
Chanen's Auto Supply Co., Quincy, IL	14	12	1
Craig Motor Service Co., Inc., Clarksburg, WV	18	10	10
Crow-Burlingame Co., Little Rock, AR	54	59	4
Dayton Warehouse Co., Valley City, ND	11	21	8
Everson Co., H. E., Grand Forks, ND	21	15	1
Fochtman Motor Co., Petoskey, MI	12	13	3
General Automotive Supply Co., Worchester, MA	24	10	1
Hedahls, Inc., Bismarck, ND	13	20	9
Inter-State Auto Supply Co., Elizabethtown, KY	15	20	7
Keenan Auto Parts Co., Albany, GA	31	21	18
Keyston Brothers, San Francisco, CA	14	47	—
Linkon's Auto Supply Co., Centralia, IL	26	23	4
Motor Bearings and Parts Co., Raleigh, NC	18	25	5
Motor Rim & Wheel Service, Montebello, CA	11	42	1
National Auto Supply Co., Hazelwood, MO	27	32	16
Northern Auto Supply Co., Div. of Northern Industries, Marshfield, WI	28	20	11
O.K. Auto Parts, Inc., Ironwood, MI	10	10	1
OK Auto Supply Co., Inc., Ishpeming, MI	13	11	8
Pope's Inc., Baton Rouge, LA	25	19	9
Rodefeld Co., Inc., Richmond, IN	15	15	11
Rupp Automotive, Chillicothe, MO	18	10	6
Sanel Auto Parts, Inc., Concord, NH	28	25	4
Sieg Nebraska Co., Omaha, NE	10	11	—
Steego Auto Parts, West Palm Beach, FL	56	19	8
Sturdevant's Inc., Wahpeton, ND	12	10	5
Valley Motor Supply, Havre, MT	35	32	6
Wharton & Barnard, Inc., Milford, DE	10	14	2
Western Auto Parts Co., Fargo, ND	11	20	8
Womwell Automotive Parts Co., Inc., Lexington, KY	16	14	3
Woolwine Supply Co., The, Pratt, KS	11	12	3

*Although these regional chains meet the requirements for a listing on this chart, they in no way reflect the total number of company-owned or associate jobber stores involved with Big A Auto Parts, based in Houston, TX.

Source: JOBBER TOPICS, Directory of Automotive Jobbers, 1983-84.

Scope of the Automotive Service Industry—In Brief

Category	Number
Motor vehicle manufacturers (1977)	322[1]
Motor vehicle parts and accessories manufacturers (1977)	2,623[1]
Automotive production remanufacturers	1,435[2]
Manufacturers merchandise agents and brokers selling automotive parts and supplies (i.e., manufacturers' agents) (1977)	940[3]
Manufacturers' sales branches and sales offices selling automotive parts and supplies (1977)	701[3]
Wholesalers of automotive parts and supplies (1982)	29,839[4]
Gasoline service stations qualified for repair and service work (1984)	86,364[5]
Automobile repair shops (1982)	88,568[6]
New car dealers (1982)	25,641[4]
Used car dealers (1982)	11,551[4]
Fleets (of 10 or more vehicles—1982)	47,050[7]
Merchant wholesalers of farm and garden machinery and equipment (1982)	13,204[4]
TBA dealers (1983)	20,000[8]
Mass merchandisers (1983)	2,800[8]
National trade associations and industry groups (1983)	88[9]
State and regional (multi-state) trade associations (1983)	37[9]

National Sales Figures

Sales of merchant wholesalers of automotive parts and supplies (1982)	$45.6 billion[7]
Automotive parts and service sales at retail (1983)	$83.2 billion[8]

Sources: [1]U.S. Census of Manufacturers (1977). [2]Estimates by the Automotive Parts Rebuilders Assn. (1984). [3]U.S. Census of Business (1977). [4]U.S. Census of Business (1982). [5]SUPER SERVICE STATION magazine (1984). [6] U.S. Census of Service Industries (1982). Figure is for number of establishments with payroll. [7]Fleet Equipment magazine (1982). [8]National Automobile Dealers Assn. [9]JOBBER TOPICS magazine (1983).

Total Parts and Service Market: 1978-1983

(Billions of Dollars)

	1978	1979	1980	1981	1982	1983
Franchised New Car Dealerships	$20.2	$22.6	$21.8	$21.9	$22.9	$25.1
Auto Repair Shops[1]	15.2	17.7	18.8	19.9	21.0	23.1
Tire, Battery, and Accessory Dealers	11.4	13.0	14.3	15.4	16.1	17.6
Gasoline Service Stations	5.5	5.9	6.5	6.9	7.2	7.8
Mass Merchandisers	5.6	6.0	6.2	6.8	7.0	7.6
All Others[2]	1.7	1.8	1.8	1.9	2.0	2.0
Total	59.6	67.0	69.4	72.8	76.2	83.2

Source: National Automobile Dealers Assn., Industry Analysis Department and U.S. Bureau of Census. [1]Includes independent and franchised repair shops. [2]Includes non-franchised dealers, farm implement dealers, and fleet shops. NOTE: Revenue for each type of repair facility includes tire sales.

State-by-State Look

State	Car Registration[1]	Truck & Bus Registration[1]	Total Registration[1]	Whclesaling Outlets[2]
Ala.	2,194,794	844,666	3,039,460	566
Alaska	199,956	188,594	318,550	49
Ariz.	1,582,896	632,653	2,215,549	384
Ark.	965,330	516,036	1,481,366	397
Calif.	13,420,945	3,709,458	17,130,403	2,760
Colo.	1,843,399	658,328	2,501,727	386
Conn.	2,099,377	158,598	2,257,975	398
Del.	333,803	80,961	414,764	70
D. of C.	212,762	18,606	231,368	29
Fla.	6,753,616	1,580,978	8,334,594	1,563
Ga.	2,995,234	920,585	3,915,819	923
Hawaii	528,125	58,181	586,306	78
Idaho	529,194	343,442	872,636	159
Ill.	5,855,187	1,386,795	7,241,982	1,274
Ind.	2,874,145	1,009,472	3,883,617	773
Iowa	1,667,984	677,821	2,345,805	502
Kan.	1,392,762	668,412	2,061,174	415
Ky.	1,809,711	805,630	2,615,341	496
La.	2,010,151	790,276	2,800,427	526
Maine	541,222	201,635	742,857	160
Md.	2,421,184	472,241	2,893,425	435
Mass.	3,296,631	452,937	3,749,568	730
Mich.	5,005,544	1,244,745	6,250,289	1,229
Minn.	2,338,304	940,121	3,278,425	597
Miss.	1,214,950	378,071	1,593,021	336
Mo.	2,540,190	871,315	3,411,505	745
Mont.	451,097	306,827	757,924	141
Neb.	804,626	410,365	1,214,991	290
Nev.	513,450	196,516	709,966	99
N.H.	660,588	112,976	773,564	124
N.J.	4,389,581	527,798	4,917,379	940
N.M.	779,944	413,217	1,193,161	156
N.Y.	7,201,767	1,033,090	8,234,857	1,940
N.C.	3,445,754	1,137,551	4,583,305	865
N.D.	380,683	272,343	653,026	138
Ohio	6,324,670	1,311,190	7,635,860	1,357
Okla.	1,787,616	992,184	2,779,800	393
Ore.	1,467,482	607,214	2,074,696	338
Pa.	5,617,934	1,106,805	6,724,739	1,434
R.I.	507,284	78,776	586,060	115
S.C.	1,518,689	456,053	1,974,742	375
S.D.	376,735	238,651	615,386	105
Tenn.	2,765,974	615,242	3,381,216	734
Texas.	7,992,738	3,395,095	11,387,833	1,932
Utah	712,027	326,384	1,038,411	208
Vt.	269,966	80,915	350,881	77
Va.	3,153,409	551,938	3,705,347	683
Wash.	2,296,429	940,425	3,236,854	502
W. Va.	792,707	349,229	1,141,936	279
Wis.	2,560,470	601,867	3,162,337	554
Wyo.	298,847	208,754	507,601	80
TOTAL	123,697,863	35,811,962	159,509,825	29,839

Sources: [1]U.S. Federal Highway Administration (figures for 1982). [2]U.S. Census of Wholesale Trade (1982). [3]Vehicles per wholesaling outlet obtained by dividing outlets into total registration. Final figure is average for all states. [4]R. L. Polk & Co., Marketing Ser-

at the Wholesaler's Market

Vehicles Per Wholesaling Outlet[3]	Car Dealers[4]	Truck Dealers[4]	Service Stations[5]	Auto Repair Shops[6]	State
5,370	335	245	1,221	2,473	Ala.
6,501	23	15	156	346	Alaska
5,770	169	102	738	1,764	Ariz.
3,731	289	237	105	2,085	Ark.
6,207	1,812	949	5,484	16,633	Calif.
6,481	326	225	1,304	2,293	Colo.
5,850	347	175	1,514	1,618	Conn.
5,925	56	36	252	335	Del.
7,978	29	12	171	176	D. of C.
5,332	782	425	3,548	6,660	Fla.
4,242	507	361	2,235	3,799	Ga.
7,517	27	16	313	620	Hawaii
5,488	152	117	572	850	Idaho
5,684	1,544	1,005	4,053	6,463	Ill.
5,024	635	467	2,284	3,891	Ind.
4,672	733	600	2,206	2,743	Iowa
4,967	418	330	1,486	2,258	Kan.
5,273	353	277	1,709	2,473	Ky.
5,324	424	309	1,293	2,517	La.
4,652	187	127	598	1,145	Maine
6,652	308	183	1,632	2,042	Md.
5,136	560	303	2,467	3,905	Mass.
5,086	1,155	794	2,806	4,624	Mich.
5,491	565	449	2,325	2,868	Minn.
4,741	260	204	718	1,672	Miss.
4,579	647	502	2,448	4,017	Mo.
5,375	174	135	621	859	Mont.
4,190	365	306	1,293	1,581	Neb.
7,171	57	40	293	511	Nev.
6,238	132	87	450	844	N.H.
5,231	626	307	3,637	4,502	N.J.
7,648	128	96	684	1,014	N.M.
4,245	1,330	772	6,354	9,055	N.Y.
5,299	858	563	2,298	4,817	N.C.
4,732	259	227	599	507	N.D.
5,627	1,127	710	3,387	6,374	Ohio
7,073	414	328	1,530	2,692	Okla.
6,138	292	185	984	2,174	Ore.
4,689	1,413	857	5,028	9,455	Pa.
5,096	80	41	450	651	R.I.
5,266	400	273	1,193	2,232	S.C.
5,861	173	153	654	678	S.D.
4,607	521	359	1,587	3,062	Tenn.
5,894	1,517	1,108	4,257	11,085	Texas
4,992	138	107	644	1,019	Utah
4,557	83	59	320	512	Vt.
5,425	510	349	2,040	3,033	Va.
6,448	364	239	1,401	3,002	Wash.
4,093	231	168	898	1,026	W. Va.
5,708	727	530	2,368	2,880	Wis.
6,345	91	82	401	422	Wyo.
5,346[3]	24,653	16,546	86,964	154,194	TOTAL

vices Division (1983). [5]SUPER SERVICE STATION (April 1984). Figures represent stations qualified for automotive repair and service work. [6]U.S Census of Business (1977).

ASIA Wholesaler's Costs, Income And Profit as Percentage of Sales

	Median Wholesaler (1982)
SALES	100.00%
Cost of Goods Sold	65.48%
GROSS MARGIN OF PROFIT (Sales minus cost of goods sold)	34.52%
SELLING EXPENSE (Includes: Advertising & sales promotion; salesmen's salaries, commission, travel, etc.; sales supervisory salaries & commissions; countermen's salaries & commissions.)	9.68%
DELIVERY EXPENSE (Includes: Delivery salaries (including bonuses); vehicle operating expenses; depreciation—vehicle equipment; transportation out and parcel post.)	2.33%
STORE AND OCCUPANCY EXPENSE (Includes: Stockroom wages; heat, light & water; rent (or depreciation.))	4.74%
GENERAL AND ADMINISTRATIVE EXPENSE (Includes: Executive salaries & bonuses; supervisory salaries & bonuses; clerical salaries, wages & bonuses; purchase & inventory control salaries & wages; travel & trade relations; office supplies & postage; misc. G & A expense (dues & donations); EDP equipment or purchase service cost; telephone & telegraph; legal & professional fees; general taxes; general insurance; employee benefits.)	13.95%
TOTAL OPERATING EXPENSES	31.83%
NET OPERATING INCOME	2.71%
TOTAL OTHER INCOME	1.38%
TOTAL INCOME	4.14%
TOTAL OTHER EXPENSES	1.23%
NET PROFIT BEFORE MACHINE SHOP	2.81%
NET PROFIT FROM SHOP OPERATIONS	.62%
NET PROFIT BEFORE TAXES	2.97%
FEDERAL INCOME TAXES	.61%
NET PROFIT AFTER TAXES	2.04%

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Quick Profile of the Median ASIA Wholesaler

Figures Apply to 1982

SALES PERFORMANCE	
Average Sales Volume	$1,318,600
Percent Increase Over Previous Year	4.9%
Cash Sales as Percent of Total Sales	29.25%
PROFITABILITY PERFORMANCE	
Gross Profit Margin as Percent of Net Sales	34.52%
Net Profit Before Taxes as Percent of Net Sales	2.97%
Net Profit After Taxes as Percent of Net Sales	2.04%
ASSET MANAGEMENT	
Average Inventory Turnover Rate	3.14 (times)
Number of Days Average Inventory Carried	117 Days
Days Credit Sales in Accounts Receivable	43 Days
FINANCIAL MANAGEMENT[1]	
Net Worth to Total Indebtedness	1.61 to 1
Current Ratio	3.29 to 1
Accounts Receivable to Accounts Payable	1.16 to 1
OPERATING EXPENSES	
Total Operating Expenses to Net Sales	31.83%
Total Payroll Expense as Percent of Net Sales	18.36%
PERSONNEL MEASUREMENTS	
Sales Volume Per All Non-Shop Employees	$85,100
Average Payroll Per All Non-Shop Employees	$15,350
MACHINE SHOP PERFORMANCE	
Shop Sales Per Shop Employee	$22,880
Average Wage or Salary Per Shop Employee	$15,160
Gross Profit Margin as Percent of Shop Labor Sales	35.98%
Shop Net Profits to Shop Labor Sales	13.10%

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association. [1]These ratios relate dollars to dollars. In the ratio of accounts receivable to accounts payable, for instance, the median wholesaler had $1.16 of accounts receivable for every $1.00 of accounts payable.

The Meaning of Median Figures

Readers will notice that a number of tables in this special section make use of median figures instead of, say, average figures. Many modern business analysts believe that medians are more precise than averages—hence a growing trend toward the use of medians.

The word "median," according to the dictionary, refers to the middle. In a statistical sampling, the word median refers to that firm whose figures place it in the exact middle of the sampling. In a study of the business costs of a thousand automotive wholesalers, for example, the median wholesaler would be that firm in the middle; five hundred of the firms would have higher costs and five hundred would have lower costs—in graduated figures working away from that median or middle firm.

ASIA's Median Wholesaler: How His Profits Scored in 1982

	Median Wholesaler (1982)
Gross Profit Margin as Percent of Net Sales	34.5%
Net Profit (Before Taxes) as Percent of Net Sales	2.9%
Net Profit (After Taxes) as Percent of Net Sales	2.0%
Net Profit (Before Taxes) as Percent of Total Assets	7.6%
Net Profit (After Taxes) as Percent of Total Assets	5.4%
Net Profit (Before Taxes) as Percent of Net Worth	13.4%
Net Profit (After Taxes) as Percent of Net Worth	9.9%
Net Profit (Before Taxes) as Percent of Net Working Capital	12.6%
Net Profit (After Taxes) as Percent of Net Working Capital	8.8%
Shop Gross Profit as Percent of Shop Labor Sales	35.9%
Shop Net Profit as Percent of Shop Labor Sales	13.1%

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Balance Sheet of Median ASIA Wholesaler—1982

	Median Wholesaler (1982)
ASSETS	
Cash and Marketable Securities	10.06%
Accounts & Notes Receivable, Trade, Net	20.96%
Inventory (End of Period)	50.65%
All Other Current Assets	2.27%
Total Current Assets	83.69%
Net Fixed & All Other Non-Current Assets	16.31%
Total Assets	100.00%
LIABILITIES AND NET WORTH	
Accounts & Notes Payable, Trade	20.10%
Other Notes Payable & Other Current Liabilities	6.85%
Total Current Liabilities	26.68%
Long Term Liabilities	14.32%
Total Liabilities	41.01%
Total Net Worth or Equity	58.99%
Total Liabilities & Net Worth	100.00%

Source: 1983 Edition of *Automotive Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Leading Merchandise Items As Reported by ASIA Wholesalers

The following merchandise items proved to be "best sellers" for ASIA wholesalers during 1982. Each item contributed more than one percent to the average wholesaler's total sales volume.

1. Exhaust System Parts
2. Spark Plugs
3. Points, Rotors, Caps, Condensers, etc.
4. Storage Batteries
5. Alternators, Starters
6. Paint & Thinner
7. Belts and Hoses (all)
8. Shock Absorbers, Levelers
9. Oil Filters
10. Brake Shoes & Discs
11. Water Pumps & Kits
12. Carburetors & Repair Kits
13. Manual Hand Tools
14. Air Filters
15. Clutch Units
16. Ball Joints & Repair Kits
17. Electrical Wiring & Cables
18. Engine Gaskets
19. Master & Wheel Cylinders
20. Abrasives, Masking Tape
21. Power Hand Tools
22. Brake Linings, Blocks, Pads
23. Sealed Beams
24. Anti-Freeze

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

Employee Pay as Percent of Sales —Based on Median ASIA Jobber

Figures Apply to 1982

	Percent Of Sales (1982)
Outside Salesmen's Salaries, Travel, etc.	1.9%
Countermen's Salaries & Commissions	4.9%
Deliverymen's Salaries (Including Bonuses)	.8%
Stockroom Wages	1.0%
Executive Salaries & Bonuses	3.2%
Clerical Salaries & Bonuses	1.6%
Purchase & Inventory Salaries & Wages	none
Employee Benefits	1.2%
Total Payroll Expense	18.4%
Total Compensation	21.8%

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

ASIA Jobber's Operating Costs As Percent of Gross Margin

	Median Wholesaler (1982)
Total Selling Expenses as Percent of Net Sales	9.7 %
Total Selling Expenses as Percent of Gross Margin	28.2 %
Non-People Sales Expenses as Percent of Total Sales Expenses	10.8 %
Total Delivery Expenses as Percent of Net Sales	2.3 %
Total Delivery Expenses as Percent of Gross Margin	7.2 %
Non-People Delivery Expenses as Percent of Total Delivery Expenses	56.6 %
Total Store & Occupancy Expenses as Percent of Net Sales	4.7 %
Total Store & Occupancy Expenses as Percent of Gross Margin	15.2 %
Non-People Store & Occupancy Expenses as Percent of Total Store & Occupancy Expenses	71.7 %
Total General & Administrative Expenses as Percent of Net Sales	13.9 %
Total General & Administrative Expenses as Percent of Gross Margin	39.2 %
Non-People General & Administrative Expenses as Percent of Total General & Administrative Expenses	49.7 %

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Leading Product Groupings As Reported by ASIA Wholesalers

The following product "families" or lines proved to be the "best sellers" for ASIA wholesalers during 1982. Lines are ranked according to the dollar volume of sales generated.

1. Starting, Generating, Electrical
2. Ignition System Parts
3. Exhaust System Parts
4. Brake System Parts
5. Cooling System Parts
6. Engine Parts (Internal)
7. Paint, Body & Equipment
8. Chassis, Steering, Suspension
9. Filters & Cartridges
10. Accessories & Specialty Items
11. Hand Tools (Manual and Power)
12. Fuel System Parts
13. Shop Equipment (Service Dealers)
14. Chemicals
15. Lighting System
16. Bearings (All Except Engine)
17. Tires
18. Small Engines & Parts

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

PBE Wholesalers' Cost of Doing Business, as Reported by ASIA

Median Figures—Based on 1983 Operations and Expressed as Percentage of Total Sales

NET SALES (After Returns & Allowances)	100.0%
Cost of Sales—Merchandise	65.7%
Gross Margin of Profit—Merchandise	34.3%
Total Operating Expenses (Selling, Delivery, Store, General & Administrative)	31.8%
Net Operating Income	2.4%
Total Other Income	1.2%
Total Other Expenses	.8%
Net Profit Before Taxes	2.5%
Federal Income Tax	.4%
Net Profit After Taxes	2.1%

OPERATING EXPENSES	
Labor & Commissions (All payroll for executives, salesmen, and other employees)	16.4%
Advertising and Sales Promotion	.4%
Vehicle Expense—Total (Includes delivery expenses, salesmen's cars, other company operated vehicles)	1.6%
Freight	.2%
Donations	.1%
Professional Fees (Includes Legal, Accounting, etc.)	.3%
Bad Debts	.4%
Dues and Subscriptions	.1%
Interest	.8%
Depreciation (Vehicle equipment, store fixtures, etc.)	1.5%
Travel and Entertainment (All company related)	.3%
Utilities (Heat, Lights, Water)	.4%
Telephone	.6%
Insurance (Includes group, life, vehicle, etc.)	1.6%
Office and Store Expense (Supplies, light bulbs, etc.)	.5%
Rent	1.4%
Repair and Maintenance (Building)	.3%
Data Processing Equipment (Leasing, purchase, service)	.6%
Taxes (General)	.4%
Taxes (Payroll—for all employees)	1.3%
Employee Benefits (Includes profit sharing, pension fund, IRA, etc.)	.6%
Additional Expenses	.4%
TOTAL OPERATING EXPENSES	31.8%

Median Sales for all reporting PBE Wholesalers—$1,206,023
Inventory Turnover (Median) — 5.1 Turns
Number of Employees (including executives) — Full Time—9
Part Time—1.5

Source: 1984 Edition of Cost of Doing Business Study for ASIA PBE Wholesaler Division.

Expense Item Statement For Median ASIA Jobber

	Percent of Net Sales (1982)
Advertising and Sales Promotion	.63%
Salesmen's Salaries, Travel, etc.	1.92%
Inside Countermen's Salaries & Commissions	4.91%
Total Selling Expenses	9.68%
Delivery Salaries (including bonuses)	.83%
Vehicle Operating Expense	.79%
Total Delivery Expenses	2.33%
Stockroom Wages	1.02%
Heat, Lights and Water	.78%
Rent (or depreciation)	1.65%
Repairs & Maintenance (building)	.23%
Depreciation (store fixtures and equipment)	.26%
Total Store & Occupancy Expenses	4.74%
Executive Salaries and Bonuses	3.18%
Supervisory Salaries and Bonuses	1.49%
Clerical Salaries and Wages	1.65%
Purchasing & Inventory Control Salaries and Wages	none
Office Supplies and Postage	.47%
EDP Equipment and/or Purchase Service Cost	.59%
Telephone and Telegraph	.62%
Bad Debts less Recoveries	.23%
Legal and Professional Fees	.26%
Taxes, General	.39%
Taxes, Payroll	1.49%
Insurance, General	.69%
Employee Benefits	1.18%
Total General & Administrative Expenses	13.95%
TOTAL OPERATING EXPENSE	**31.83%**

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

U.S. Battery Shipments by Year

Year	Replacement	Original Equipment	Total Number
1980	50,063,224	10,018,409	60,081,633
1981	53,597,906	10,005,102	63,603,008
1982	54,200,000	8,400,000	62,600,000
1983	56,104,752	10,822,900	66,927,652

Source: Battery Council International.

ASIA's Median Wholesaler: How Well He Managed His Assets

	Median Wholesaler (1982)
Change in Inventory During Year	(Up) 5.2%
Average Inventory Turnover Rate	3.1 (Times)
Number of Days Average Inventory Carried	117 (Days)
Cash Sales as a Percent of Total Sales	29.2%
Days of Credit Sales in Accounts Receivable	43 (Days)
Sales as a Percent of Net Working Capital	4.44%
Ratio of Sales to Assets (Total Asset Turnover)	2.43 to 1[1]

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by Automotive Service Industry Association. [1]This ratio relates dollars to dollars. There were $2.43 of sales, for instance, to every $1.00 of assets.

Key Business Ratios For ASIA's Median Wholesaler[1]

	Median Wholesaler (1982)
Ratio of Net Worth to Total Indebtedness	1.61 to 1
Ratio of Total Assets to Net Worth	1.61 to 1
Ratio of Sales to Net Worth (Turnover of Net Worth)	4.09 to 1
Ratio of Current Assets to Current Debts	3.29 to 1
Ratio of Accounts Receivable to Accounts Payable	1.16 to 1

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association. [1]All these ratios relate dollars to dollars. In the ratio of sales to net worth, for instance, the median wholesaler had $4.09 of sales for every $1.00 of net worth.

Productivity Measures For Staff of ASIA Jobber

Average Number of Non-Shop Employees	13
Merchandise Sales Per Non-Shop Employee	$85,100
Merchandise Gross Margin Per Non-Shop Employee	$28,960
Operating Expense Per Non-Shop Employee	$26,770
Total Payroll Expense as Percent of Merchandise Sales	18.4%
Total Compensation as Percent of Merchandise Sales	21.8%

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Relative Size of State and Regional Wholesaler Associations

1983 Rank	Association	Regular Members	Assoc. Members
1	Texas	1,662	—
2	California	1,223	—
3	Illinois	924	384
4	Ohio	655	156
5	Florida	648	119
6	Michigan	600	60
7	New Jersey	576	174
8	Missouri/Kansas	503	91
9	Pennsylvania	500	45
10	New England	454	—
11	Washington	443	70
12	North Carolina	440	60
13	Kentucky	398	45
14	Alabama	375	25
15	New York	349	50
16	Indiana	345	50
17	Oklahoma	307	—
18	Tennessee	302	21
19	Chesapeake	298	38
20	Virginia	265	55
21	Louisiana	250	45
22	Oregon	245	29
23	Iowa	235	125
23	Georgia	235	39
24	Minnesota	222	15
25	Wisconsin	200	95
26	South Carolina	180	14
27	New Mexico	150	60
28	Arizona	138	40
29	Nebraska	120	60
30	Mississippi	97	—
31	Arkansas	93	—
32	Rocky Mountain	87	52
33	Idaho	75	95
34	West Virginia	54	29
35	North Dakota	45	7
36	Montana	31	—
37	Nevada	25	—
TOTALS		13,749	2,148

Source: October 1983 issue of JOBBER TOPICS.

ASIA Wholesaler's Shop Profit As Percent of Labor Sales—1982

	Median Wholesaler (1982)
SALES—SHOP LABOR	100.00%
Cost of Shop Labor Sales (Salaries, Wages & Bonuses)	64.00%
GROSS PROFIT ON SHOP LABOR SALES	36.00%
All Other Shop Expenses (Overhead, Depreciation, Repairs & Maintenance, Supplies, etc.)	20.50%
NET PROFIT FROM SHOP OPERATIONS	13.10%

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

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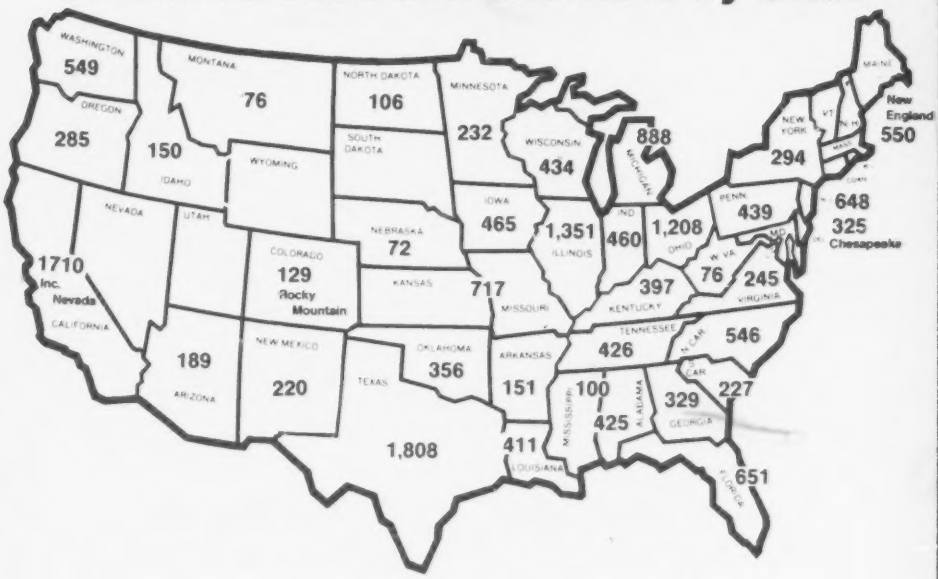
Jobber Association Members by State



Source: October 1983 issue of JOBBER TOPICS.

Certified Mechanics By Type of Employer

Employer	Number of Certifications	Percent of Total
Domestic Dealership	63,910	38.18
Import Dealerships	17,589	10.50
Service Stations	21,902	13.08
Independent Garages	18,314	10.94
Specialty Shops	5,958	3.55
Tire Dealers	5,237	3.12
Mass Merchandisers	2,994	1.78
Fleets (private)	6,138	3.66
Other	25,333	15.13
TOTAL:	167,375	100%

Source: The National Institute For Automotive Service Excellence. Figures represent technicians currently certified.

Number of Workers, by Category Of Median ASIA Wholesaler

Job Classification	Average Number Employed
Outside Salesmen	2.0
Countermen	6.0
Deliverymen	2.0
Stockroom Employees	2.5
Executives	2.0
General & Administrative Clerical Employees	2.0
Purchase & Inventory Employees	2.0
Non-Shop Employees	14.2
Shop Employees	3.6

Source: 1983 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Where Jobbers Sell Selected Items

	Brake Parts[1]	Chemicals[1]	Rebuilt Engines[2]	Parts For Import Cars[1]
Service Stations	31.8%	35.1%	14.1%	19.4%
Car/Truck Dealers	10.9%	10.4%	4.5%	10.1%
General Repair Shops	22.0%	11.7%	27.5%	25.7%
Specialized Shops	3.6%	6.0%	4.5%	6.6%
Fleet Accounts	6.1%	11.5%	18.9%	2.4%
Farm Implement Dealers	1.4%	1.9%	2.2%	1.0%
Tire Dealers	2.7%	2.1%	.9%	2.1%
Retail Trade	20.2%	19.6%	22.5%	22.8%
Other	1.3%	1.7%	2.3%	9.9%

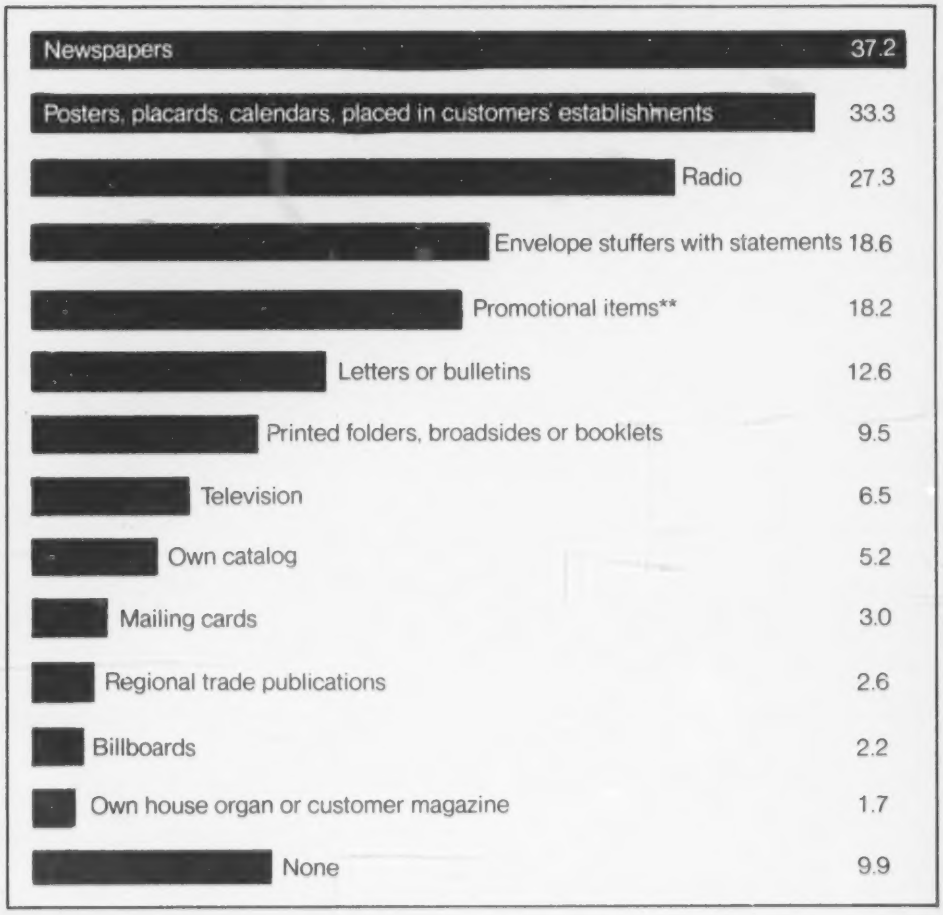
Source: JOBBER TOPICS Market Probe Reports, 1983-84. [1]Includes only jobbers whose retail sales of the product amount to less than 50% of all sales of that product. [2]Includes only jobbers with machine shops.

United States Shipments

Year	Original Equipment	Replacement	Export	Total
1976	49,905,133	122,099,524	4,104,659	177,009,316
1977	55,667,960	129,283,293	4,600,816	189,552,114
1978	54,962,674	135,151,410	3,752,806	193,866,890
1979	48,188,000	121,922,000	3,909,000	174,019,000

Source: *Rubber Manufacturers Association.* [1]Figures have been adjusted to include those manufacturers, both foreign and domestic, that do not report to RMA. Since the

Where Jobbers Advertise



**Yellow pages; ball point pens; caps; jackets; coupons; flyers; direct mail tabloids.
*Totals over 100 percent due to multiple mentions.
Source: Jobber Topics Forum Report, January 1984.

Of Passenger Car Tires

Year	Original Equipment	Replacement	Export	Total
1980	34,932,806	106,912,217	4,074,250	145,919,273
1981[1]	35,979,000	125,263,000	4,017,000	165,259,000
1982	33,981,000	130,539,000	2,949,000	167,469,000
1983	43,845,000	133,964,000	4,206,000	182,015,000

1981 figures, for the first time, represent 100 percent of the U.S. tire market, any comparisons with previous figures are invalid.

Number of Automobile Dealers By Year, 1950 to 1984

Date	No. of Retail Outlets	Pct. Gain or Loss from Previous Year
January 1, 1950	46,821	−4.78
January 1, 1951	47,543	+1.54
January 1, 1952	46,014	−3.22
January 1, 1953	45,191	−1.79
January 1, 1954	41,910	−7.26
January 1, 1955	40,374	−3.66
January 1, 1956	41,018	+1.60
January 1, 1957	37,982	−7.40
January 1, 1958	37,188	−2.09
January 1, 1959	35,077	−5.68
January 1, 1960	33,658	−4.05
January 1, 1961	32,482	−3.49
January 1, 1962	31,331	−3.54
January 1, 1963	30,853	−1.53
January 1, 1964	30,827	−0.08
January 1, 1965	30,691	−0.44
January 1, 1966	30,278	−1.35
January 1, 1967	28,422	−6.14
January 1, 1968	27,784	−2.24
January 1, 1969	27,486	−1.07
January 1, 1970	27,071	−1.51
January 1, 1971	26,126	−3.49
January 1, 1972	25,621	−1.93
January 1, 1973	25,441	−0.70
January 1, 1974	25,349	−0.36
January 1, 1975	24,980	−1.46
January 1, 1976	24,453	−2.11
January 1, 1977	24,268	−0.76
January 1, 1978	24,147	−0.50
January 1, 1979	24,051	−0.40
January 1, 1980	23,379	−2.79
January 1, 1981	21,772	−6.87
January 1, 1982	21,680[1]	−0.41
January 1, 1983	20,799[2]	−4.06
January 1, 1984	20,841[2]	+0.20

Source: Reprinted with permission from *Automotive News*. Copyright 1984. [1]Jan. 1, 1982 and subsequent totals include Volkswagen. [2]Jan. 2, 1983 and subsequent total includes Renault.

Unit Sales by Median Jobbers Of Selected Product Lines

Line	Unit Sales Per Month of Median Jobber: Type A Jobber*	Type B Jobber**
Alternators (New and remanufactured)	24	25
Batteries	28	20
Brake Lining Sets	122	94
Cables:		
Battery	54	52
Spark Plug	50	44
Carburetors (New and Remanufactured)	12	15
Clamps	300	200
Exhaust System Parts:		
Mufflers	50	25
Pipes	82	44
Filters:		
Air	140	100
Fuel	120	85
Oil	250	150
Fuel Pumps	36	32
Gasket Sets:		
Complete Overhaul	8	10
Valve Grind	20	12
Grease (Measured in Pounds)	100	50
Hoses	100	55
Ignition Parts:		
Breaker Points/Condensers	200	125
Coils	20	15
Distributor Caps/Rotors	52	50
Ignition Switches	16	15
Oil (Measured in Cases)	35	25
Piston Ring Sets	14	5
Sealed Beams	84	40
Shock Absorbers	55	25
Spark Plugs	1,392	900
Starter Drives	18	25
Suspension Parts:		
Ball Joints	20	10
Idler Arms	12	10
Tie Rod Ends	20	15
V-Belts	150	100
Water Pumps	30	25
Water Bearings/Oil Seals	65	55

*Group A Jobbers have retail sales of item listed that account for 50 percent or less of that item's total sales. **Group B Jobbers have retail sales of item listed that are greater than 50 percent of that item's total sales.

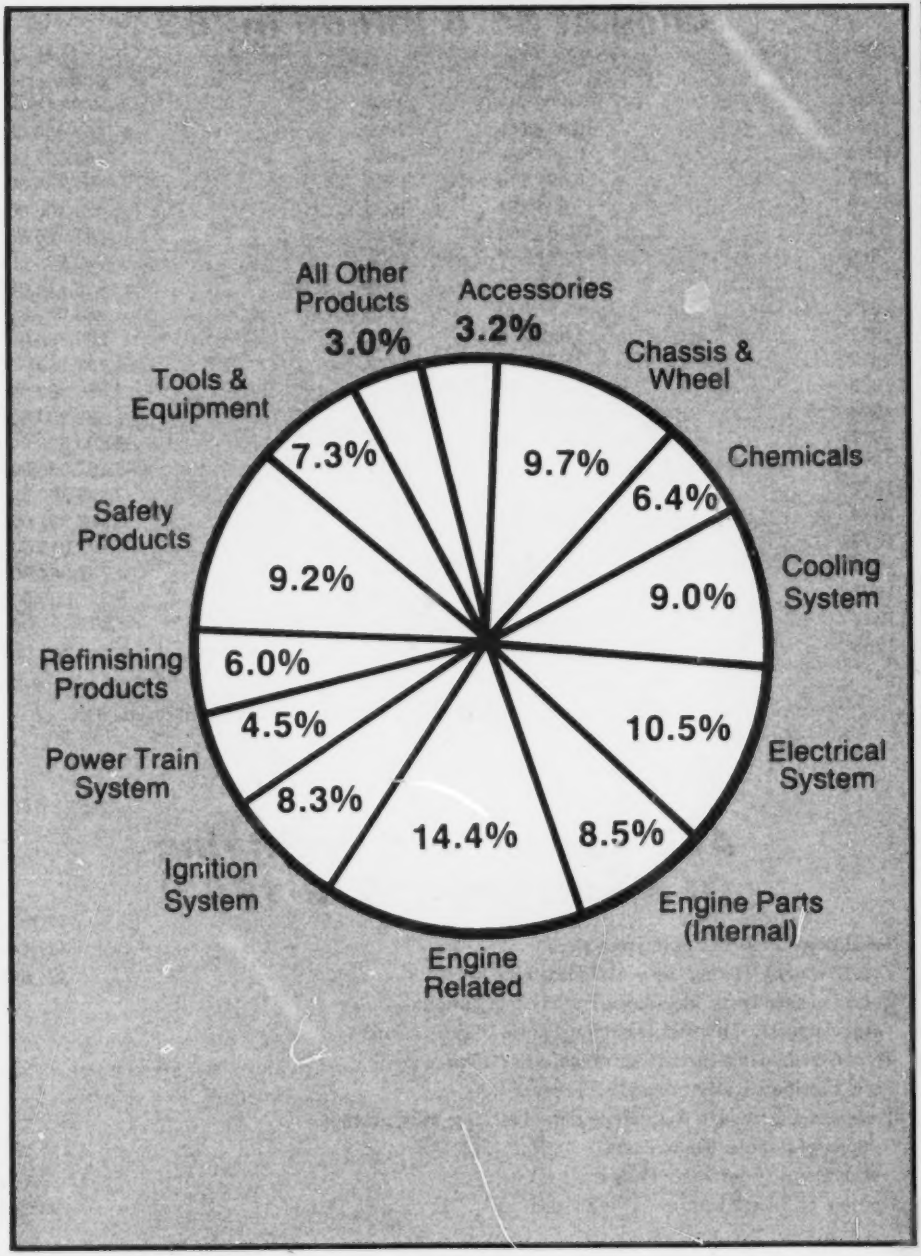
Source: "MARKET PROBE" reports—Irving-Cloud Publishing Co.

MEMA's "Composite" Wholesaler

ASSETS	1982	1981	1980
Cash	8.1%	8.0%	9.2%
Accounts Receivable	19.2%	22.1%	21.4%
Inventory	44.7%	49.6%	50.3%
Total Current Assets	72.0%	79.7%	80.9%
Deferred Assets	28.0%	20.3%	19.1%
Total Assets	100.0%	100.0%	100.0%
LIABILITIES & NET WORTH			
Current Debt	36.7%	31.4%	31.2%
Long Term Debt	16.3%	14.1%	16.9%
Net Worth	47.0%	54.5%	51.9%
Total Debt & Net Worth	100.0%	100.0%	100.0%
FINANCIAL RATIOS			
Collection Period—Days	31.5	34	40
Quick Ratio	.74	.96	.98
Current Ratio	1.96	2.53	2.59
Inventory to Working Capital	126.7%	102.8%	101.0%
Inventory to Current Assets	62.1%	62.2%	62.1%
Current Debt to Inventory	82.1%	63.4%	62.0%
Current Debt to Net Worth	78.0%	57.6%	60.0%
Total Debt to Net Worth	112.1%	83.5%	94.5%
PROFIT & LOSS STATEMENT	1982	1981	1980
Net Sales	100.0%	100.0%	100.0%
Cost of Goods Sold	66.6%	67.0%	66.2%
Gross Profit	33.4%	33.0%	33.8%
*Expenses	31.0%	30.1%	31.0%
Net Profit After Taxes	2.4%	2.9%	2.8%
OPERATING RATIOS			
Gross Profit to Sales	33.4%	33.0%	33.8%
Net Profit to Sales	2.4%	2.9%	2.8%
Net Profit to Net Worth	11.1%	12.9%	12.5%
Net Profit to Working Capital	14.8%	14.6%	13.0%
Net Profit to Total Assets	5.2%	7.0%	6.5%
EFFICIENCY RATIOS—TIMES			
Net Sales to Net Worth	4.7	4.5	4.4
Net Sales to Working Capital	6.3	5.0	4.6
Inventory Turnover	3.3	3.3	3.1
Net Sales to Total Assets	2.2	2.4	2.3

Source: 1983 Edition of the *Automotive Distributor Trends & Financial Analysis*, published by the Motor & Equipment Manufacturers Association. *Includes net of other income, deduction and taxes.

MEMA Study: Jobber Sales By Product Category



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Canadian Wholesalers Report Sales of $5.5 Billion in '83

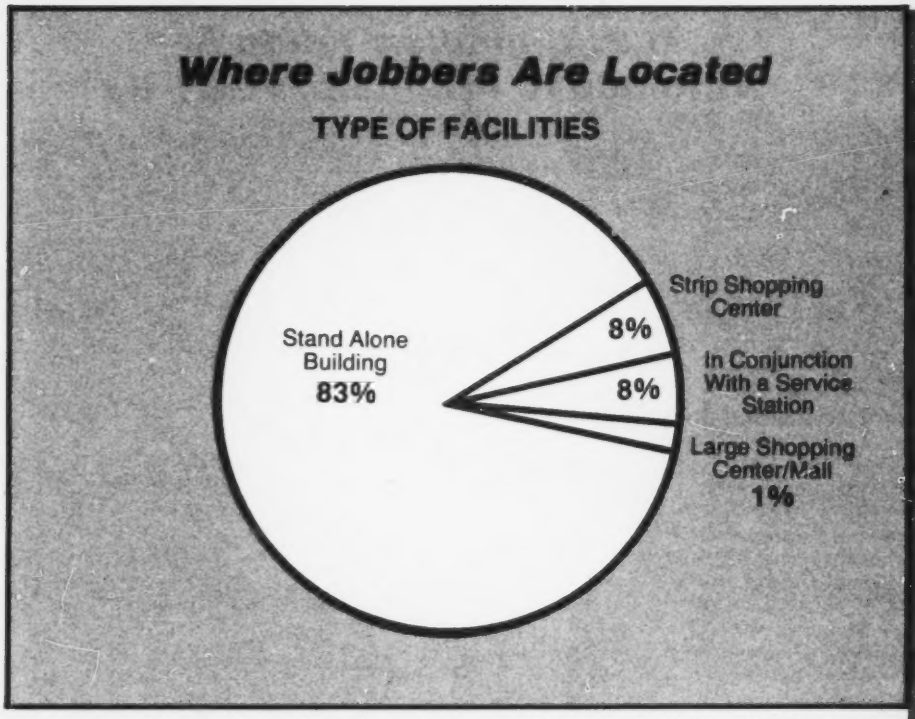
Year	Vehicle Registrations	Year	Automotive Jobber Sales
1963	6,074,655	1963	$ 457,000,000
1964	6,457,850	1964	462,262,000
1965	6,698,778	1965	494,154,000
1966	7,035,261	1966	524,400,000
1967	7,495,203	1967	567,980,000
1968	7,877,547	1968	702,886,000
1969	8,254,160	1969	816,114,000
1970	8,497,339	1970	865,681,000
1971	9,022,136	1971	968,650,000
1972	9,619,400	1972	1,721,114,000
1973	10,295,000	1973	2,060,367,000
1974	10,910,000	1974	2,529,207,000
1975	11,444,643	1975	2,808,506,000
1976	11,674,000	1976	3,197,059,000
1977	12,421,000	1977	3,328,360,000
1978	12,975,000	1978	3,572,951,000
1979	13,225,000	1979	4,192,613,000
1980	13,717,152	1980	4,787,964,000
1981	13,851,482	1981	5,276,000,000
1982	14,310,717	1982	5,208,500,000
1983	NA	1983	5,547,987,000

Source: Automotive Industries Association of Canada and External Trade Div. of Statistics Canada.

ASE Testing and Certifying Of Mechanics (1972-1983)

Total Registered, excluding repeaters	337,746
Total Actually Taking tests, excluding repeaters	336,865
Total Passing Tests, including expired certifications	272,602
Total Currently Certified, excluding expired certifications	175,245
Total Certified in either all Automobile or all Truck areas	33,425
Total Certified in all Auto and all Truck	1,180
Total also Certified in Body Repair and Painting & Refinishing	195
Number of Regular Tests Taken	1,591,666
Number of Regular Tests Passed	1,027,150
Number of Recertification Tests Passed	180,236

Source: The National Institute For Automotive Service Excellence. Reprinted with permission.


Where Jobbers Are Located
TYPE OF FACILITIES
Stand Alone Building 83%
Strip Shopping Center 8%
In Conjunction With a Service Station 8%
Large Shopping Center/Mall 1%

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12 Leading Vehicle Producers—Worldwide, '81, '82, '83

	1983	1982	1981
1. General Motors	7,769,000	6,244,000	6,762,000
2. Ford Motor Co.	4,934,231	4,267,587	4,402,462
3. Toyota	3,182,614	3,155,784	3,254,942
4. Nissan	2,462,436	2,557,269	2,811,580
5. Renault	2,237,185	1,992,985	1,527,000
6. Volkswagen	2,060,992	2,039,869	2,196,000
7. Peugeot-Citroen	1,737,012	1,616,393	1,585,000
8. Fiat	1,441,870	1,335,187	1,364,000
9. Chrysler Corp.	1,338,972	1,006,245	1,082,500
10. Mazda	1,261,350	1,202,583	1,230,000
11. Honda	1,087,775	1,020,698	1,045,000
12. Mitsubishi	1,018,403	1,024,243	1,095,000

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U.S.-Canadian Trade in Automotive Products, 1981-83

	1983	1982	Value Change	Percent Change
U.S. IMPORTS FROM CANADA				
	(Canadian $000,000)			
Cars	$ 8,110	$ 7,170	$ 940	13.1%
Trucks, etc.	4,375	3,946	429	10.9%
Parts	6,290	4,902	1,388	28.3%
Tires & Tubes	410	406	4	1.0%
TOTAL	$19,185	$16,424	$2,761	16.8%
CANADA IMPORTS FROM U.S.				
Cars	$ 4,430	$ 2,875	$1,555	54.0%
Trucks, etc.	950	873	77	8.8%
Parts	10,225	9,676	549	5.7%
Tires & Tubes	190	147	43	29.3%
TOTAL	$15,795	$13,571	$2,224	16.4%
BALANCE				
Cars	+3,680	+4,295	−615	
Trucks, etc.	+3,425	+3,073	+362	
Parts	−3,935	−4,774	+839	
Tires & Tubes	+220	+259	−39	
TOTAL		+2,853	+547	

Source: Aut .otive Industries Assn. of Canada.

Where Fleets Purchase Replacement Parts

	Dealer/ distributor	Independent shop	Fleet Specialist	Jobber	Other
Engine	57%	9%	10%	18%	6%
Transmission	48	12	20	16	4
Driveline	31	16	22	26	5
Axles	56	12	12	20	—
Brakes	19	14	15	46	6
Wheels/Tires	29	17	12	33	9
Cooling System	22	25	16	29	8
Electrical System	23	18	12	41	6
Filters	19	11	7	57	6
AVERAGE	**34%**	**16%**	**14%**	**31%**	**5%**

Source: Forum Report, FLEET MAINTENANCE & SPECIFYING, January, 1983.

Performance Measures For ASIA Warehouse Distributors

	Median Distributor (1983)
SALES PERFORMANCE	
Dollars of Net Sales	$4,003.06
Percent of Sales Change Over Prior Year	5.43%
Number of Manufacturers Represented	65
Number of Product Lines Represented	102
PROFITABILITY PERFORMANCE	
Gross Margin to Net Sales	23.77%
Net Operating Profit to Net Sales	3.04%
Net Profit Before Taxes to Total Assets	5.41%
Net Profit Before Taxes to Net Worth	14.12%
Net Profit Before Taxes to Net Working Capital	12.57%
ASSET MANAGEMENT	
Average Inventory Turnover Rate	3.70 times
Days Sales in Accounts Receivable	42.70 days
Sales to Net Working Capital	5.64 to 1
Total Asset Turnover	2.37 to 1
FINANCIAL MANAGEMENT	
Net Worth to Total Indebtedness	82.76%
Total Assets to Net Worth	2.21 to 1
Turnover to Net Worth	5.58 times
Current Assets to Current Liabilities	2.03 to 1
Cash Plus Marketable Securities Plus Trade Receivables to Current Debt	.86 to 1
Accounts Receivable to Accounts Payable	1.02 times
OPERATING EXPENSE CONTROL	
Total Operating Expense to Net Sales	20.56%
Total Operating Expense to Gross Margin	87.13%
Selling Expense to Net Sales	4.36%
Delivery Expense to Net Sales	2.29%
Warehouse & Occupancy Expense to Net Sales	4.91%
General & Administrative Expense to Net Sales	8.68%
PERSONNEL PRODUCTIVITY	
Net Sales Volume Per Employee	$ 163.71
Gross Margin Per Employee	38.61
Net Sales Volume Per Outside Salesman	1,434.04
Total Payroll Expense as a Percent of Net Sales	10.57%
Total Payroll Expense as a Percent of Gross Margin	46.46%

Source: 1984 Edition of the Cost of Doing Business Analysis for ASIA Automotive Warehouse Distributors. Some figures in the above table relate dollars to dollars. The figures for "Sales to Net Working Capital," for instance, can be interpreted to mean there were $5.64 sales for every dollar of working capital.

MEMA's Profile of Average WD

ASSETS	1982	1981	1980
Cash	7.1%	2.5%	4.5%
Accounts Receivable	30.1%	32.7%	29.9%
Inventory	45.3%	48.6%	46.3%
Total Current Assets	82.5%	83.8%	80.7%
Deferred Assets	17.5%	16.2%	19.3%
Total Assets	100.0%	100.0%	100.0%
LIABILITIES & NET WORTH			
Current Debt	51.3%	48.9%	51.2%
Long Term Debt	8.8%	8.7%	10.2%
Net Worth	39.9%	42.4%	38.6%
Total Debt & Net Worth	100.0%	100.0%	100.0%
FINANCIAL RATIOS			
Collection Period—Days	42.4	45	51
Quick Ratio	.72	.72	.67
Current Ratio	1.61	1.71	1.57
Inventory to Working Capital	145.4%	139.1%	157.3%
Inventory to Current Assets	54.9%	57.9%	57.4%
Current Debt to Inventory	113.5%	100.6%	110.7%
Current Debt to Net Worth	128.8%	125.3%	132.6%
Total Debt to Net Worth	150.3%	136.8%	159.1%

PROFIT & LOSS STATEMENT	1982	1981	1980
Net Sales	100.0%	100.0%	100.0%
Cost of Goods Sold	77.8%	76.9%	74.5%
Gross Profit	22.2%	23.1%	25.5%
*Expenses	20.4%	21.3%	23.5%
Net Profit After Taxes	1.8%	1.8%	2.0%
OPERATING RATIOS			
Gross Profit to Sales	22.2%	23.1%	25.5%
Net Profit to Sales	1.8%	1.8%	2.0%
Net Profit to Net Worth	11.4%	11.4%	12.7%
Net Profit to Working Capital	14.7%	13.8%	16.7%
Net Profit to Total Assets	4.6%	4.8%	4.9%
EFFICIENCY RATIOS—TIMES			
Net Sales to Net Worth	6.5	6.2	6.4
Net Sales to Working Capital	8.3	7.5	8.4
Inventory Turnover	4.5	4.1	3.9
Net Sales to Total Assets	2.6	2.6	2.4

Source: 1983 Edition of the *Automotive Distributor Trends & Financial Analysis*, published by the Motor & Equipment Manufacturers Association. *Includes net of other income, deduction and taxes.

1982 Motor Bus Registration

	Private and Commercial		Publicly Owned			
	Commercial Buses[1]	School and Other[2]	Federal	School[3]	Total School Buses	Total Buses
Alabama	1,944	180	17	6,159	6,339	8,308
Alaska	810	466	52	252	718	1,580
Arizona	1,185	201	335	2,819	3,020	4,540
Arkansas	39	1,237	13	4,574	5,811	5,863
California	13,643	7,075	267	13,126	20,201	34,111
Colorado	695	879	38	3,585	4,464	5,197
Connecticut	2,143	6,408	18	645	7,053	9,214
Delaware	337	1,144	—	153	1.297	1,634
Florida	3,667	1,170	108	27,233	28,403	32,178
Georgia	1,131	2,263	68	10,357	12,620	13,819
Hawaii	2,177	594	17	590	1,184	3,378
Idaho	715	399	139	1,609	2,008	2,862
Illinois	5,829	13,566	52	3,857	17,423	23,304
Indiana	5,163	4,568	30	8,656	13,224	18,417
Iowa	921	279	7	6,700	6,979	7,907
Kansas	417	1,130	7	2,476	3,606	4,030
Kentucky	816	634	59	7,053	7,687	8,562
Louisiana	967	12,990	23	4,257	17,247	18,237
Maine	163	417	21	1,847	2,264	2,448
Maryland	2,775	3,639	90	3,739	7,378	10,243
Massachusetts	3,700	7,093	17	332	7,425	11,142
Michigan	2,214	5,215	29	12,752	17,967	20,210
Minnesota	2,205	4,252	34	10,675	14,927	17,166
Mississippi	977	2,148	62	4,723	6,871	7,910
Missouri	885	3,022	73	5,786	8,808	9,766
Montana	399	736	66	1,066	1,802	2,267
Nebraska	472	642	7	2,896	3,538	4,017
Nevada	1,301	142	90	108	250	1,641
New Hampshire	347	941	1	251	1,192	1,540
New Jersey	5,202	6,928	47	2,246	9,174	14,423
New Mexico	492	2,160	378	453	2,613	3,483
New York	13,545	7,353	90	11,515	18,868	32,503
North Carolina	1,814	7,318	42	21,346	28,664	30,520
North Dakota	91	479	34	1,283	1,762	1,887
Ohio	9,117	3,396	36	12,357	15,753	24,906
Oklahoma	406	1,493	123	9,207	10,700	11,229
Oregon	1,216	2,145	55	5,482	7,627	8,898
Pennsylvania	8,381	14,142	102	5,707	19,849	28,332
Rhode Island	316	1,241	5	—	1,241	1,562
South Carolina	854	2,769	16	8,038	10,807	11,677
South Dakota	279	434	50	1,401	1,835	2,164
Tennessee	1,880	1,325	45	8,374	9,699	11,624
Texas	3,009	11,792	175	23,573	35,365	38,549
Utah	310	77	53	696	773	1,136
Vermont	98	451	11	759	1,210	1,319
Virginia	2,277	243	122	10,244	10,487	12,886
Washington	626	2,059	185	7,126	9,185	9,996
West Virginia	893	61	22	2,454	2,515	3,430
Wisconsin	1,407	6,640	28	3,854	10,494	11,929
Wyoming	949	143	1	1,360	1,503	2,453
District of Columbia	2,269	34	236	269	303	2,808
Total	113,468	156,113	3,596	286,020	442,133	559,197

Source: U.S. Federal Highway Administration. [1]Includes municipally-owned transit buses. [2]In some instances church, industrial and other private buses are included here; and in other instances privately-owned school buses could not be segregated from commercial buses, and are included with the latter. [3]This column consists primarily of publicly-owned school buses but includes a few privately-owned institutional and industrial buses registered free or at a reduced rate.

Operating Costs of Average WD As Percent of Net Sales: AWDA

Figures Apply to 1983 Operating Experience

	Percent of Net Sales
SALES	
Gross Sales, Merchandise	122.12%
Returned Sales & Allowances, Merchandise	−17.09%
Returned Sales & Allowances, Cores	−5.03%
Total Reductions	−22.12%
NET SALES	100.00%
COST OF GOODS SOLD	
Inventory at Beginning of Period	19.82%
Purchases (net after returns)	77.94%
Merchandise Available for Sales	97.76%
Inventory at End of Period	20.90%
COST OF GOODS SOLD	76.86%
GROSS MARGIN	23.14%
OPERATING EXPENSES	
Selling Expenses	4.28%
(These include: salaries and/or commissions for supervisors, countermen, sales trainers; salesmen travel and trade relations costs; vehicle operation and depreciation, suppliers; advertising and sales promotion; WATS or leased line to customers.)	
Delivery and Shipping Expenses	2.23%
(These include: salaries and/or wages for supervisors, drivers; drivers' travel costs; vehicle operation and depreciation; supplies; postage; transportation out.)	
Warehouse and Occupancy Expenses	5.51%
(These include: salaries and/or wages for supervisors, warehouse employees, clerical workers; supplies; heat, light, water; rent; depreciation of buildings, land improvements, leasehold improvements, and warehouse fixtures and equipment; repairs and maintenance for buildings, fixtures and equipment.)	
General and Administrative Expenses	6.74%
TOTAL OPERATING EXPENSES	18.76%
OPERATING INCOME	4.38%
OTHER INCOME	1.90%
(This includes: cash discounts earned; interest received or accrued; gain on sales of assets; service bureau fees; rental income; dividends from subsidiaries; dividend income; other.)	
OTHER EXPENSE	2.90%
(This includes: cash discounts allowed; interest paid or accrued; employees' profit sharing, employees' pension fund expenses.)	
PRETAX INCOME	3.38%

Source: 1984 *AWDA Financial Analysis Report* of the Automotive Warehouse Distributors Association.

Balance Sheet of Median AWDA Distributor—1983

ASSETS	Pct. of Total Assets
Current Assets	
Cash	1.78%
Receivables, Net	33.42%
Merchandise Inventories	45.40%
Other Current Assets	.69%
Total Current Assets	81.29%
Property, Plant & Equipment Cost	18.38%
Accumulated Depreciation	−8.58%
Net Property, Plant & Equipment	9.80%
Other Assets	8.91%
Total Assets	100.00%
LIABILITIES	
Current Liabilities	
Notes Payable—Bank	9.59%
Notes Payable—Other	3.74%
Accounts Payable	29.59%
Other Current Liabilities	3.27%
Income Taxes Payable	.68%
Total Current Liabilities	46.87%
Long-Term Debt	
Notes Payable	8.20%
Deferred Ledger Balances	.81%
Branch Inter-company Account	4.46%
Total Long-Term Debt	13.47%
Total Liabilities	60.34%
EQUITY	
Net Worth	39.66%
Total Liabilities and Equity	100.00%

Source: 1984 *AWDA Financial Analysis Report* of the Automotive Warehouse Distributors Assn.

Milestones in Production Of Cars[1]

Units	Year
1 millionth	1912
10 millionth	1920
50 millionth	1935
100 millionth	1952
150 millionth	1960
200 millionth	1967
250 millionth	1972
300 millionth	1979

Source: Motor Vehicle Manufacturers Association of the U.S., Inc. [1]Based on U.S. total factory sales data.

AWDA Figures for WD Net Profit, Turnover, Sales Per Employee

Company Size (By Dollar Vol.)	Average Net Sales Volume	Net Profit Before Taxes (Percent)	Days Sales Outstanding Accts. Rec. (Days)	Median Inventory Turns	Sales Per Employee (Dollars)
Under $2,000,000	$ 2,134,378	1.03%	43.04	2.75	$133,149
$2,000,000 to $3,000,000	3,538,719	1.17%	55.91	3.45	172,033
$3,000,000 to $4,000,000	5,284,315	3.17%	42.87	3.54	169,044
$4,000,000 to $7,000,000	8,181,446	3.38%	44.66	3.91	160,641
$7,000,000 to $10,000,000	11,881,678	3.16%	47.32	4.20	186,907
$10,000,000 & Over	34,338,386	3.55%	43.07	4.80	197,950
All Companies	11,856,550	3.38%	44.65	3.70	181,182

Source: 1984 *AWDA Financial Analysis Report* of the Automotive Warehouse Distributors Assn.

Milestones in Production Of Motor Trucks and Buses[1]

100,000th	1915
500,000th	1918
1 millionth	1920
5 millionth	1929
10 millionth	1938
25 millionth	1953
50 millionth	1971
75 millionth	1979

Source: Motor Vehicle Manufacturers Association of the U.S., Inc. [1]Based on total U.S. factory sales data.

Factors Influencing A Fleet's Buying Decisions

Choosing One Replacement Component Brand Over Another

	Availability	Dependability	Cost	Reputation	Serviceability	Warranty
Private Fleet	61%	70%	48%	25%	34%	25%
Contract/Common Carrier	70	70	44	30	36	29
Bus Fleet	45	55	43	13	20	15
Utility Fleet	45	25	25	10	15	5
Lease/Rental Fleet	40	53	27	13	20	13
Government Fleet	60	40	40	10	30	20
AVERAGE	54	52	38	17	26	18

Source: FLEET MAINTENANCE & SPECIFYING Forum Report, January 1983. Totals do not equal 100% due to multiple mentions.

MEMA Members Forecast Overall 1984 Sales Increase

	Dollar Sales Forecast 1984 vs. 1983 %	Unit Sales Forecast 1984 vs. 1983 %
PRODUCT GROUP		
Accessories	+ 8.1	+ 5.0
Autobody Supplies	+11.9	+10.2
Chassis Parts	+15.1	+12.3
Chemicals	+14.1	+12.5
Electrical Systems	+19.0	+14.8
Engine Parts	+14.6	+11.3
Tools and Equipment	+15.3	+12.6
TOTAL INDUSTRY	+14.1	+11.5
% of Industry Forecasting Increase	96.3	95.6
Average Increase	+14.5	+11.7
% of Industry Forecasting Decrease	2.2	2.2
Average Decrease	− 3.5	− 3.5
% of Industry Forecasting No Change	1.5	2.2
FORECAST BY ANNUAL PRODUCT SALES CATEGORY		
Under $1 million	+10.9	+ 9.3
$1 million to $5 million	+14.8	+12.7
$5 million to $15 million	+12.3	+10.3
$15 million and over	+14.6	+11.9

Source: Motor & Equipment Manuafacturers Association.

United States Car Production By Model Year, 1959 to 1982

Year	Cars	Year	Cars
1983	5,768,893	1970	7,595,411
1982	5,447,135	1969	8,440,765
1981	6,639,954	1968	8,402,870
1980	7,085,480	1967	7,666,898
1979	9,526,024	1966	8,606,166
1978	8,995,418	1965	7,882,679
1977	9,159,100	1964	7,892,090
1976	8,114,376	1963	7,339,992
1975	6,523,880	1962	6,686,749
1974	8,125,488	1961	5,407,256
1973	9,915,802	1960	6,011,482
1972	8,589,049	1959	5,566,527
1971	7,221,290		

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Latest Financial Rankings of

Automobile Parts—Miscellaneous
Figures Apply to 1982 With Certain Exceptions, As Noted

RANK	COMPANY	REVENUES ($ MILL.) '82 AMT
1	Federal-Mogul Corp.	735.30
2	Echlin, Inc.	490.60
3	Guardian Industries Corp.	408.50
4	Sealed Power Corp.	366.00
5	Bearings, Inc.	350.40
6	Allen Group, Inc.	315.30
7	Amerace Corp.	269.60
8	Standard Products Co.	263.80
9	Raymark Corp.	260.70
10	Standard Motor	178.50
11	Intermark, Inc.	172.50
12	Modine Manufacturing Co.	169.20
13	Wynn's International, Inc.	163.80
14	Sparton Corp.	142.20
15	Hayes-Albion Corp.	141.80[1]
16	Facet Enterprises,. Inc.	135.90[1]
17	Lamson & Sessions Co.	140.40
18	Kysor Industries Corp.	126.70
19	Douglas & Lomason Co.	109.70
20	Republic Automotive	99.70
21	Champion Parts	95.00
22	Trico Products Corp.	94.90
23	Simpson Industries, Inc.	92.30
24	Twin Disc, Inc.	90.40
25	Arrow Automotive	80.40
26	LSB Industries, Inc.	77.60
27	Superior Industries	69.80
28	Cascade Corp.	63.00
29	D.A.B. Industries, Inc.	58.00
30	Hastings Manufacturing	52.20
31	Braun Engineering Co.	49.20
32	Bomaine Corp.	33.80
33	Redlaw Industries, Inc.	32.30
34	Howell Industries, Inc.	29.30[1]
35	Metex Corp.	12.30

RANK	COMPANY	NET INCOME ($ MILL.) '82 AMT
1	Guardian Industries Corp.	33.60
2	Federal-Mogul Corp.	28.40
3	Echlin, Inc.	26.50
4	Sealed Power Corp.	22.80
5	Standard Motor	15.00
6	Standard Products Co.	12.60
7	Allen Group, Inc.	11.80
8	Sparton Corp.	9.20
9	Bearings, Inc.	5.40
10	Modine Manufacturing Co.	3.80
11	Facet Enterprises, Inc.	2.90[1]
12	Wynn's International, Inc.	2.70
13	Arrow Automotive	2.20
14	Superior Industries	2.10
15	Republic Automotive	2.00
16	Champion Parts	1.70
16	Hastings Manufacturing	1.70
18	Douglas & Lomason Co.	1.40
19	Simpson Industries, Inc.	0.30
20	Howell Industries, Inc.	0.10[1]
21	Metex Corp.	0.03
22	Bomaine Corp.	d0.08
23	Cascade Corp.	d0.20
23	Kysor Industrial Corp.	d0.20
25	Redlaw Industries, Inc.	d0.60
26	Intermark, Inc.	d0.90
27	Amerace Corp.	d1.10
28	Braun Engineering Co.	d1.40
29	D.A.B. Industries, Inc.	d3.40
30	Twin Disc, Inc.	d3.60
31	Raymark Corp.	d8.90
31	Trico Products Corp.	d8.90
33	Hayes-Albion Corp.	d10.80[1]
34	LSD Industries, Inc.	d12.40
35	Lamson & Sessions Co.	d18.80

Automobile Parts—Major (1982)

RANK	COMPANY	REVENUES ($ MILL.) '82 AMT
1	Eaton Corp.	2,452.60
2	Dana Corp.	2,422.90
3	Genuine Parts Co.	1,936.50
4	Cummins Engine Co., Inc.	1,587.50
5	Libbey-Owens-Ford Co.	1,098.60
6	Timken Co.	1,014.40
7	Champion Spark Plug Co.	783.70
8	Smith (A.O.) Corp.	694.20
9	Arvin Industries, Inc.	513.90
10	Sheller-Globe Corp.	500.20
11	Barnes Group, Inc.	439.70
12	Acklands Ltd.	278.70

RANK	COMPANY	NET INCOME ($ MILL.) '82 AMT
1	Genuine Parts Co.	100.20
2	Dana Corp.	51.60
3	Champion Spark Plug Co.	26.80
4	Libbey-Owens-Ford Co.	16.00
5	Sheller-Globe Corp.	13.60
6	Arvin Industries, Inc.	10.90
7	Cummins Engine Co., Inc.	7.70
8	Acklands Ltd.	1.00
9	Barnes Group, Inc.	d2.70
10	Timken Co.	d3.00
11	Smith (A.O.) Corp.	d16.80
12	Eaton Corp.	d71.00

Publicly-Owned Automotive Firms

Automobile Parts—Miscellaneous
Figures Apply to 1982 With Certain Exceptions, As Noted

OPERATING PROFIT MARGIN (%)			RETURN ON CAPITAL (%)		
RANK	COMPANY	'82 AMT	RANK	COMPANY	'82 AMT
1	Guardian Industries	16.00	1	Sparton Corp.	18.56
2	Standard Motor	15.60	2	Standard Products Co.	15.61
3	Sealed Power Corp..	11.60	3	Standard Motor	14.90
3	Sparton Corp.	11.60	4	Sealed Power Corp.	10.15
5	Echlin, Inc.	10.40	5	Guardian Industries Corp.	10.05
6	Bomaine Corp.	10.20	6	Echlin, Inc.	9.24
7	Federal Mogul Corp.	9.00	7	Superior Industries	8.96
8	LSB Industries, Inc.	8.80[2]	8	Hastings Manufacturing	8.26
9	Standard Products Co.	8.60	9	Modine Manufacturing Co.	8.15[2]
10	Modine Manufacturing Co.	8.20[2]	10	Federal Mogul Corp.	6.41
11	Champion Parts	7.30	11	Arrow Automotive	6.35
12	Hastings Manufacturing	6.40	12	Republic Automotive	5.38
13	Arrow Automotive	5.50	13	Douglas & Lomason Co.	4.82
14	Facet Enterprises, Inc.	5.40	14	LSB Industries, Inc.	4.45[2]
15	Superior Industries	5.30	15	Bearings, Inc.	4.22
16	Republic Automotive	4.50	16	Facet Enterprises, Inc.	3.55
17	Intermark, Inc.	4.00	16	Champion Parts	3.32
18	Wynn's International, Inc.	3.90	18	Wynn's International, Inc.	3.15
19	Bearings, Inc.	3.10	19	Howell Industries, Inc.	1.40[1]
20	Allen Group, Inc.	2.70	20	Simpson Industries, Inc.	0.72
21	Howell Industries, Inc.	2.30[1]	21	Metex Corp.	0.23
22	Douglas & Lomason Co.	2.00	22	Allen Group, Inc.	..
22	Kysor Industrial Corp.	2.00	22	Amerace Corp.	..
24	Haymark Corp.	1.30	22	Bomaine Corp.	..
25	Braun Engineering Co.	1.10	22	Braun Engineering Co.	..
26	Simpson Industries, Inc.	0.10	22	Cascade Corp.	..
27	Amerace Corp.	..	22	D.A.B. Industries, Inc.	..
27	Cascade Corp.	..	22	Hayes-Albion Corp.	..
27	D.A.B. Industries, Inc.	..	22	Intermark, Inc.	..
27	Hayes-Albion Corp.	..	22	Kysor Industrial Corp.	..
27	Lamson & Sessions Co.	..	22	Lamson & Sessions Co.	..
27	Metex Corp.	..	22	Raymark Corp.	..
27	Redlaw Industries, Inc.	..	22	Redlaw Industries, Inc.	..
27	Trico Products Corp.	..	22	Trico Products Corp.	..
27	Twin Disc, Inc.	..	22	Twin Disc, Inc.	..
	Average	4.80		Average	4.20

Automobile Parts—Major (1982)

OPERATING PROFIT MARGIN (%)			RETURN ON CAPITAL (%)		
RANK	COMPANY	'82 AMT	RANK	COMPANY	'82 AMT
1	Genuine Parts Co.	10.00	1	Genuine Parts Co.	16.80
2	Champion Spark Plug Co.	9.00	2	Champion Spark Plug Co.	6.72
3	Dana Corp.	5.30	3	Sheller-Globe Corp.	4.9[d]
4	Acklands Ltd.	4.50	4	Arvin Industries, Inc.	4.12
5	Sheller-Globe Corp.	4.40	5	Dana Corp.	3.58
6	Barnes Group, Inc.	4.20	6	Libbey-Owens-Ford Co.	2.49
7	Arvin Industries, Inc.	4.00	7	Acklands Ltd.	1.30
8	Eaton Corp.	3.00	8	Cummins Engine Co., Inc.	0.86
9	Libbey-Owens-Ford Co.	2.80	9	Barnes Group, Inc.	..
10	Cummins Engine Co., Inc.	..	9	Eaton Corp.	..
10	Smith (A.O.) Corp.	..	9	Smith (A.O.) Corp.	..
10	Timken Co.	..	9	Timken Co.	..
	Average	3.90		Average	3.40

Source: Moody's Investor Fact Sheets-Industry Review (December 1[6], 1983 and January 27, 1984). [1]Figures apply to 1983. [2]Figures apply to 1981. dSignifie[s] net loss.

How ASIA's Heavy Duty Distributor Measured Up in Sales, Profits, Etc.

Figures Apply to 1982

	Median Distributor (1982)
SALES PERFORMANCE MEASURES	
Average Sales Volume (Merchandise Sales)	$2,254,640
Percent of Sales Change Over Previous Year	(Up) 7.6%
Cash Sales as Percent of Total Merchandise Sales	9.9%
PROFITABILITY PERFORMANCE MEASURES	
Gross Profit as a Percent of Net Merchandise Sales	35.5%
Net Profit (Before Taxes) as a Percent of Net Merchandise Sales	3.1%
Net Profit (After Taxes) as a Percent of Net Merchandise Sales	2.8%
ASSET MANAGEMENT MEASURES	
Average Inventory Turnover Rate	3.3 (Times)
Number of Days Average Inventory Carried	111 (Days)
Overall Average Collection Period	40 (Days)
FINANCIAL MANAGEMENT MEASURES	
Total Debt as a Percent of Net Worth	105.6%
Ratio of Total Assets to Net Worth	2.06 to 1[1]
Current Ratio (Assets to Liabilities)	2.38 to 1[1]
OPERATING EXPENSES	
Total Operating Expense as a Percent of Net Merchandise Sales	26.5%
Total Operating Expense as a Percent of Gross Profit From Merchandise Sales	87.6%
PERSONNEL MEASURES	
Sales Volume Per Non-Shop Employee	$103,540
Average Payroll Per Non-Shop Employee	$ 17,130
MACHINE SHOP PERFORMANCE	
Shop Sales Per Shop Employee	$ 30,480
Average Wage or Salary Per Shop Employee	$ 16,540
Gross Profit Per Machine Shop Employee	45.9%
Shop Net Profit as a Percent of Shop Labor Sales	23.1%

Source: 1983 Edition of *Management Performance Measurement for ASIA Heavy Duty Distributors*, published by the Automotive Service Industry Association. [1]Ratios relate dollars to dollars. In the ratio of total assets to net worth, for instance, there was $2.06 of total assets to every $1 of net worth.

Annual Factory Sales of Motor Vehicles From U.S. Plants

	Passenger Cars	Motor Trucks and Buses	Total Vehicles
1983	6,739,223	2,413,897	9,153,120
1982	5,049,184	1,906,455	6,955,639
1981	6,255,340	1,700,908	7,956,248
1980	6,400,026	1,667,283	8,067,309

Source: Motor Vehicle Manufacturers Association of the U.S., Inc., and Ward's Automotive Reports.

Productivity of People Working For ASIA Heavy Duty Distributors

Non-Shop Personnel	Median Distributor (1982)
Parts & Merchandise Sales Per Non-Shop Employee	$129,200
Parts & Merchandise Gross Profit Per Non-Shop Employee	$ 42,990
Personnel Productivity Index: Gross Profit to Payroll	2.39 to 1[1]
Parts & Merchandise Sales Per Outside Salesman	$645,950
Parts & Merchandise Gross Profit Per Outside Salesman	$212,410
Non-Shop Payroll as Percent of Parts & Merchandise Sales	13.1%
Non-Shop Payroll as Percent of Parts & Merchandise Gross Profit	41.9%
Non-Shop Payroll as Percent of Non-Shop Operating Expenses	49.4%
Average Payroll Per Non-Shop Employee	$ 13,010
Salary & Bonus of Highest Paid Executive	$ 55,250
Salary & Bonus of Second Highest Paid Executive	$ 35,250
Salary & Bonus of Highest Paid Executive as Percent of Parts & Merchandise Sales	1.9%
Salary & Bonus of Highest Paid Executive as Percent of Gross Profit Margin	7.3%

Machine Shop Personnel	
Machine Shop Sales Per Machine Shop Employee	$ 30,480
Machine Shop Gross Profit Per Machine Shop Employee	$ 14,140
Average Wage Per Machine Shop Employee	$ 16,540
Machine Shop Personnel Productivity Index: Gross Profit to Payroll	.76 to 1[1]

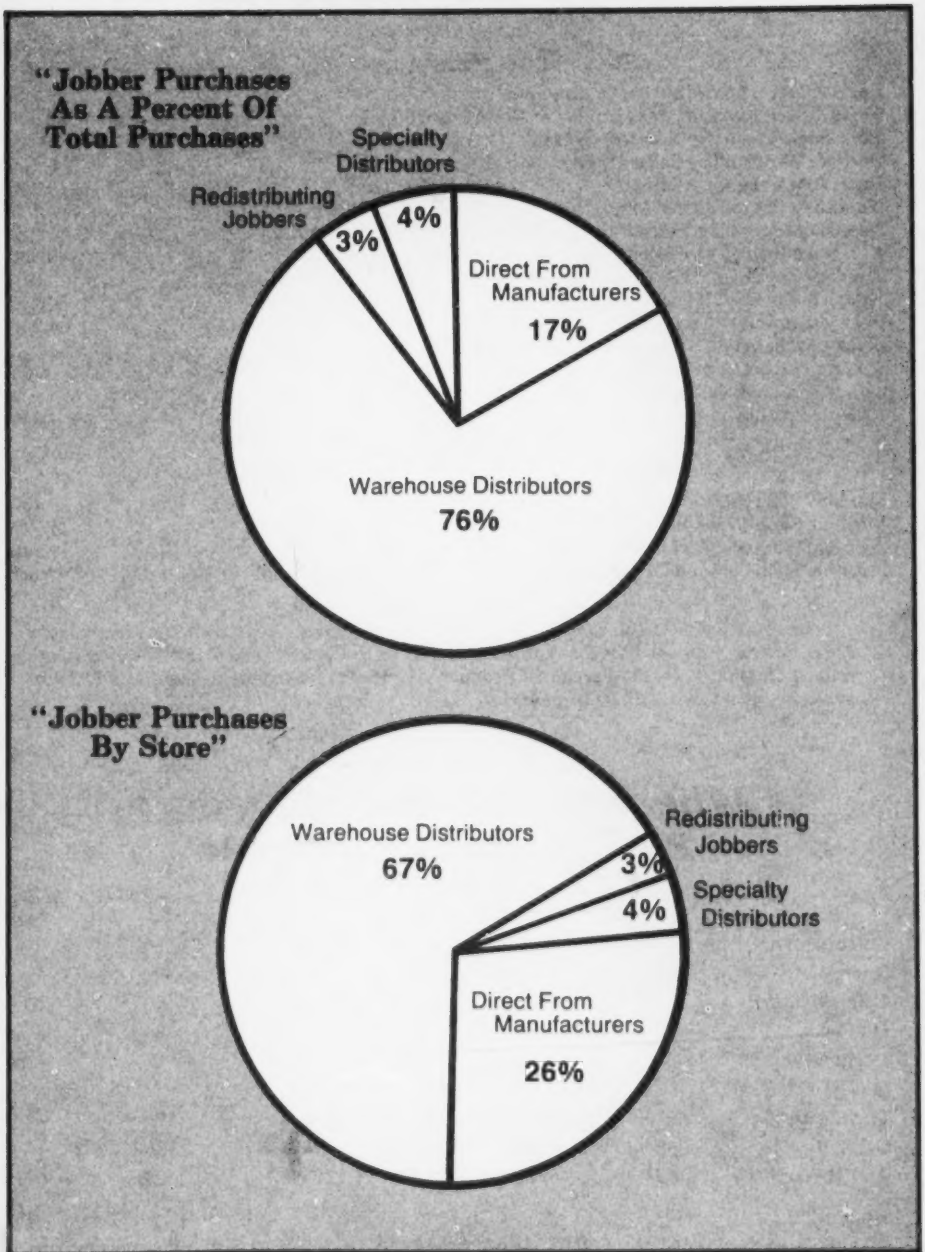
Source: 1983 Edition of *Management Performance Measurement for ASIA Heavy Duty Distributors*, published by the Automotive Service Industry Association. [1]Ratios relate dollars to dollars. In the Personnel Productivity Index, for example, there was $2.39 of gross profit for every $1.00 of payroll.

Where Heavy-Duty Managers Buy Replacement Parts[1]

	Jobber	WD	Manufacturer	Dealer	Independent Shop	Wagon Jobber
Construction	55%	45%	10%	33%	8%	4%
Mining	50	37	3	6	9	—
Utilities	65	30	13	13	9	5
Oil Fields	33	50	—	42	8	8
Logging	57	43	14	43	—	—
Heavy Manufacturing	67	33	—	50	17	—
Other	38	37	25	25	13	—
AVERAGE	53%	40%	9%	25%	9%	3%

Source: Forum Report, EQUIPMENT MANAGEMENT, February 1984. Percentages might not add up to 100% due to multiple responses. [1]Results based on a survey of where heavy-duty equipment managers purchase replacement filters.

MEMA Study Reveals Where Jobbers Buy



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Imported New Car Sales In U.S. Since 1978

	1983	1982	1981	1980	1979	1978
Alfa Romeo	3,002	2,194	2,301	3,000	4,011	6,237
Audi	47,936	45,954	50,817	42,483	42,709	40,878
BMW	59,242	52,393	41,761	37,017	34,521	31,457
Capri	—	—	—	—	—	4,079
Challenger/Conquest	14,024	14,128	12,690	12,924	14,166	17,649
Champ	34,513	—	42,128	55,474	48,860	28,296
Colt	39,158	75,031	42,796	50,689	62,705	44,570
DeLorean	—	2,830	3,009	—	—	—
Ferrari	N.A.	N.A.	N.A.	779	679	617
Fiat	6,184	14,113	32,185	37,184	58,934	60,435
Fiesta	—	—	32,856	68,595	78,109	76,145
Honda	350,670	365,865	370,705	375,388	353,291	274,876
Isuzu	20,731	15,462	17,805	—	—	—
Jaguar	15,815	10,349	4,695	3,029	3,746	4,782
Lancia	637	1,174	1,068	2,100	1,602	2,811
Mazda	173,388	163,150	166,105	161,623	156,533	75,309
Mercedes-Benz	73,692	65,963	63,059	53,790	52,819	46,695
MG	—	—	3,712	13,730	26,025	26,656
Mitsubishi	32,755	3,950	—	—	—	—
Nissan	521,902	470,246	464,805	516,890	472,252	338,096
Open	—	—	—	—	13,815	19,222
Peugeot	15,241	14,323	16,937	12,930	11,688	9,061
Porsche	21,831	14,407	11,241	10,490	13,818	17,017
Renault	33,229	37,540	30,869	25,365	18,862	15,739
Rolls-Royce	1,046	N.A.	1,158	942	1,002	1,109
Rover	—	—	—	481	—	—
Saab	26,323	18,463	14,613	13,558	15,142	15,662
Sapporo/Conquest	11,571	13,068	13,326	10,263	12,322	12,777
Subaru	156,840	150,335	152,062	142,968	127,871	103,274
Toyota	555,766	530,246	576,491	582,204	507,816	441,800
Triumph	—	—	9,768	14,939	12,733	16,447
Vista	4,303	—	—	—	—	—
Volkswagen	77,009	67,352	82,173	90,923	125,100	216,709
Volvo	88,857	72,352	64,477	56,999	56,027	50,880
TOTAL	2,386,064	2,220,911	2,326,376	2,396,934	2,327,932	2,000,500

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Average Miles Per Vehicle by Year

	CARS		BUSES			TRUCKS			
	Passenger Cars	Motorcycles	Commercial Buses	School Buses	All Buses	Single Unit Trucks	Truck Combinations	All Trucks	All Motor Vehicles
1982	9,167	2,612	31,524	6,870	11,872	11,064	49,847	12,395	9,637
1981	9,002	2,573	32,996	6,780	11,953	11,028	47,023	12,340	9,484
1980	9,135	3,144	32,765	7,592	12,103	10,070	42,705	11,433	9,410
1979	9,485	4,000	29,691	7,179	11,732	9,184	49,664	10,810	9,580
1978	10,046	4,500	30,377	7,500	12,143	9,249	49,267	10,974	10,059

Source: U.S. Federal Highway Administration, *Highway Statistics*, Annual. [1]Motorcycles are included in passenger cars. [2]Not comparable to previous years.

U.S. Car Production:

	Total Output 1983	Pct. of Total Output	Total Output 1982	Pct. of Total Output	Pct. of Change '83 vs. '82
AMERICAN MOTORS	200,381	2.82	109,552	2.20	+0.62
AMC Total	4,071	0.06	51,800	1.04	−0.98
Concord	12	0.00	17,152	0.34	−0.34
SX-4/Eagle	4,059	0.06	21,697	0.44	−0.38
Spirit	....	...	12,951	0.26	...
Renault Total	196,310	2.76	57,752	1.16	+1.60
Alliance	153,877	2.16	57,752	1.16	+1.00
Encore	42,433	0.60	....	...	+0.60
CHRYSLER CORP.	903,553	12.70	600,652	12.07	+0.63
Plymouth Total	310,748	4.37	241,181	4.85	−0.48
Horizon	117,731	1.66	77,572	1.56	+0.10
Reliant	186,445	2.62	162,053	3.26	−0.64
Caravelle	5,317	0.07	1,556	0.03	+0.04
Gran Fury	1,255	0.02	....	...	+0.02
Chrysler Total	234,203	3.29	114,443	2.30	+0.99
LeBaron	85,868	1.20	95,360	1.92	+0.72
Laser	23,603	0.33	....	...	+0.33
Chrysler/E-Class	104,999	1.48	19,083	0.38	+1.10
Fifth Avenue	19,733	0.28	....	...	+0.28
Dodge Total	358,602	5.04	244,878	4.92	+0.12
Omni	126,437	1.78	72,456	1.46	+0.32
Aries	144,006	2.02	129,235	2.60	−0.58
Daytona	19,399	0.27	....	...	+0.27
Dodge 400	26,422	0.37	30,481	0.61	−0.24
Dodge 600	41,077	0.58	12,706	0.25	+0.33
Diplomat	1,241	0.02	....	...	+0.02
FORD MOTOR CO.	1,820,245	25.59	1,104,074	22.20	+3.39
Ford Division	1,214,222	17.07	690,655	13.89	+3.18
Escort	343,632	4.83	264,972	5.33	−0.50
Fairmont	23,728	0.33	128,518	2.58	−2.25
Mustang	124,225	1.75	127,371	2.56	−0.81
LTD	179,192	2.52	132,034	2.65	−0.13
Thunderbird	186,566	2.62	29,336	0.59	+2.03
Crown Victoria	124,730	1.75	2,034	0.05	+1.70
EXP	15,445	0.22	6,389	0.13	+0.09
Tempo	216,704	3.05	....	...	+3.05
L-M Division	606,023	8.52	413,419	8.31	+0.21
Mercury Total	499,495	7.02	315,799	6.35	+0.67
Lynx	89,354	1.25	81,114	1.63	−0.38
Capri	24,697	0.35	32,704	0.66	−0.31
Zephyr	8,601	0.12	40,406	0.81	−0.69
Marquis	99,391	1.40	60,811	1.22	+0.18
Cougar	126,395	1.78	10,590	0.21	+1.57
Grand Marquis	77,147	1.08	88,404	1.78	−0.70
LN7	2,210	0.03	1,770	0.04	−0.01
Topaz	71,700	1.01	....	...	+1.01
Lincoln Total	106,528	1.50	97,620	1.96	−0.46
Continental	13,513	0.19	20,052	0.40	−0.21
Lincoln	58,872	0.83	47,609	0.96	−0.13
Mark VI/VII	34,143	0.48	29,959	0.60	−0.12

1983 Compared to 1982

	Total Output 1983	Pct. of Total Output	Total Output 1982	Pct. of Total Output	Pct. of Change '83 vs. '82
GENERAL MOTORS	4,034,629	56.73	3,072,883	61.78	−5.05
Buick Division	905,608	12.73	751,332	15.11	−2.38
Skylark	112,843	1.59	137,810	2.77	−1.18
Skyhawk	79,169	1.11	65,549	1.32	−0.21
Century	177,076	2.49	111,698	2.25	+0.24
Regal	234,179	3.29	209,068	4.20	−0.91
Buick	249,244	3.50	183,325	3.69	−0.19
Riviera	52,503	0.74	43,882	0.88	−0.14
Electra (fwd)	594	0.01	....	...	+0.01
Cadillac Division	308,497	4.34	246,354	4.95	−0.61
Cimarron	21,021	0.29	10,404	0.21	+0.08
Seville	34,622	0.49	22,706	0.46	+0.03
Eldorado	72,299	1.02	56,626	1.14	−0.12
Cadillac	180,422	2.54	156,618	3.14	−0.60
DeVille (fwd)	133	0.00	....	...	...
Chevrolet Division	1,307,429	18.38	994,178	19.99	−1.61
Chevette	201,841	2.84	208,417	4.19	−1.35
Cavalier	308,461	4.33	96,091	1.93	+2.40
Celebrity	165,595	2.33	66,361	1.33	+1.00
Camaro	193,121	2.71	214,082	4.30	−1.59
Citation	86,878	1.22	159,069	3.20	−1.98
Malibu/El Camino	107,208	1.51	103,491	2.09	−0.58
Monte Carlo	124,926	1.76	81,181	1.63	+0.13
Chevrolet	91,225	1.28	42,648	0.86	+0.42
Corvette	28,174	0.40	22,838	0.46	−0.06
Oldsmobile Division	1,083,262	15.23	759,644	15.27	−0.04
Omega	59,965	0.84	71,395	1.44	−0.60
Firenza	54,799	0.77	40,642	0.82	−0.05
Cutlass Supreme	342,929	4.82	202,060	4.06	+0.76
Cutlass Ciera	216,898	3.05	126,030	2.53	+0.52
Oldsmobile	365,044	5.13	284,439	5.71	−0.58
Olds 98 (fwd)	494	0.01	....	...	+0.01
Toronado	43,133	0.61	35,078	0.71	−0.10
Pontiac Division	429,833	6.05	321,375	6.46	−0.41
Acadian[1]	15,064	0.21	9,993	0.21	...
2000 Sunbird	114,666	1.61	41,822	0.84	+0.77
1000	42,175	0.60	34,833	0.70	−0.10
Firebird	99,629	1.40	128,077	2.57	−1.77
Phoenix	25,053	0.35	45,463	0.97	−0.56
Grd. Prix/Bonneville	93,084	1.31	12,930	0.26	+1.05
Bonneville	....	...	18,311	0.37	...
6000	....	...	29,946	0.60	...
Parisienne	12,457	0.18	....	...	+0.18
Fiero	27,705	0.39	....	...	+0.39
HONDA	55,337	0.78	620	0.01	+0.77
VOLKSWAGEN	98,207	1.38	84,246	1.69	−0.31
CHECKER	....	...	1,993	0.05	...
Total U.S. Cars	7,112,352	100.0	4,973,870	100.00	

Source: Reprinted with permission from *Automotive News*. Copyright 1984. [1]All Acadians are built for sale in Canada only.

Statistical History of the Big 'I' Show[1]

Year	Place	Exhibitors	Booths	Net Square Ft. (Booth Space)	Attendance Total
1933	Chicago	268	562	62,324	10,781
1934	Cleveland	336	798	72,261	13,348
1935	Atlantic City	350	850	92,400	12,761
1936	Chicago	357	915	98,632	13,476
1937	Chicago	380	1,012	110,095	13,045
1938	Chicago	355	947	103,412	15,526
1939	Chicago	351	961	108,413	13,366
1940	Chicago	352	969	117,331	12,925
1946	Atlantic City	430	1,169	126,888	13,712
1947	Chicago	486	1,327	171,978	19,888
1948	Chicago	520	1,444	178,510	19,534
1950	Chicago	522	1,385	172,463	17,067
1952	Atlantic City	460	1,275	143,148	14,049
1953[2]	Chicago	289	440	44,000	4,288
1954[3]	Chicago	478	984	111,978	12,880
1959	Chicago	459	1,004	118,404	21,614
1960	New York	487	1,143	119,066	34,087
1961	Los Angeles	511	1,157		44,309[4]
1962	Chicago	504	1,275	146,926	29,090
1963	Philadelphia	518	1,347	138,844	22,975
1964	San Francisco	579	1,415		53,165[4]
1965	Chicago	542	1,422	148,980	18,177
1966	New York	505	1,139	116,887	17,640
1967	Chicago	548	1,419	146,050	17,379
1968	Las Vegas	560	1,488		19,512
1969	Chicago	516	1,403	145,220	18,449
1970	Las Vegas	576	1,514	136,780	21,157
1971	Chicago	496	1,407	140,700	18,989
1972	Chicago	526	1,444	158,000	20,226
1973	Las Vegas	559	1,579	157,900	25,190
1974	Chicago	510	1,523	157,450	17,219
1975	Chicago	542	1,523	157,550	20,824
1976	San Francisco	560	1,525	152,500	21,795
1977	Chicago	579	1,643	165,200	20,958
1978	Chicago	646	[5]	193,650	23,877
1979	Las Vegas	746	2,016	201,600	28,237
1980	Chicago	684	[5]	201,880	23,156
1981	Chicago	659	[5]	191,000	23,765
1982	Las Vegas	756	2,035	203,500	27,480
1983	Chicago	639	1,921	192,130	30,572
1984	Chicago	705	[5]	201,950	32,822[6]

Sources: Hall-Erickson, Inc. and JOBBER TOPICS. [1]Before 1960, the event was known as the Automotive Service Industries Show. The "I", added in 1960, is for "International." Since 1968, whenever shows were held in Las Vegas or San Francisco, the IASI has been co-sponsored by the Pacific Automotive Show. [2]Indicates booth conference only. [3]Indicates trade show plus booth conference. [4]Attendance figures for 1961 and 1964 are "turnstyle" counts, not an actual badge count. For other years from 1962-1983, the figure is a badge count. [5]IASI officials discontinued reporting the number of show booths at Chicago Shows in 1978. [6]Attendance figure for the 1984 Show is based on total registrations, not a badge count.

Regional Automotive Show Statistics

Eastern Automotive Service Industries Show

Year	Place	Exhibitors	Booths	Net Square Ft. (Booth Space)	Total Attendance
1970	Atlantic City	243	498	49,800	10,571
1973	Atlantic City	362	730	73,850	13,957
1976	Atlantic City	417	819	83,600	15,615
1979	Atlantic City	556	960	119,200	16,043
1982	Atlantic City	589	12,115	121,150	17,266

New England Automotive Show

1975	Woburn, Mass.	231	306	33,500	18,553
1978	Woburn, Mass.	265	365	65,000	17,685
1980	Woburn, Mass.	255	360	100,000	13,016
1984	Woburn, Mass.	253	400	40,000	13,773

Pacific Automotive Show

1972	San Francisco	282	531	53,100	9,459
1973[1]	Las Vegas	559	1,579	157,900	25,190
1974	Los Angeles	332	680	68,000	10,071
1975	Anaheim	301	550	55,000	10,226
1976[1]	San Francisco	560	1,525	152,500	21,795
1977	Las Vegas	323	670	67,000	8,998
1978	San Francisco	311	661	66,100	9,061
1979[1]	Las Vegas	746	2,016	201,600	28,237
1980	Anaheim	341	742	74,200	11,086
1981	San Francisco	322	696	69,600	9,069
1982[1]	Las Vegas	756	2,035	203,500	27,480
1983	Reno	325	665	66,500	9,264
1984	Anaheim	305	665	66,500	11,705

Southern Automotive Show

1972	New Orleans	288	515	51,500	8,928
1973	New Orleans	276	386	38,600	7,971
1974	Atlanta	326	449	44,900	11,273
1975	Memphis	250	430	43,000	7,976
1976	Dallas	331	583	58,300	6,971
1977	Atlanta	433	766	76,600	9,073
1978	Dallas	409	734	73,400	8,486[2]
1979	Atlanta	376	711	71,100	7,359
1980	Dallas	306	495	49,500	5,921
1981	Atlanta	213	347	34,700	3,956
1983	Atlanta	264	442	44,200	3,500

Sources: Hall-Erickson, Inc. (producer of the Eastern Show); New England Regional Automotive Show; Pacific Automotive Show, and Southern Automotive Show. [1]The 1973, 1976, 1979 and 1982 figures relate to PAS-IASI Shows, which involve greater participation by exhibitors and visitors. [2]This is a "registration" figure as distinguished from a "verified attendance figure." The latter is a count of people who actually pick up badge holders at a show.

What It Costs to Own, Operate Average Car in 1984

Figures Based on Composite Costs*

Cost Per Mile

Cost Item	1984
Gasoline (unleaded) and oil	6.00 cents
Tires	.67 cents
Maintenance	.98 cents

Fixed Costs Per Year

Comprehensive insurance ($100 ded.)	$ 66.00
$250 deductible collision insurance	180.00
Property damage and liability ($100/300/50M)	225.00
License, registration, taxes	101.00
Depreciation	1,242.00
Finance charge (20% down, 13.5% for 4 years)	494.00
TOTAL COST PER MILE	.23 cents
TOTAL COST PER YEAR	$3,456.00

Source: American Automobile Association. The AAA study used cars that were equipped with standard accessories, automatic transmission, power steering, power disc brakes and radios. Gasoline costs were based on a $1.299 per-gallon charge for unleaded fuel. The study based insurance figures on personal, rather than business use of a vehicle. The cars were driven less than 10 miles to work. There were no youthful drivers. Depreciation costs were based on trade-in value at the end of four years or at 60,000 miles. *The costs for operating a Chevrolet Chevette, Celebrity and Impala were averaged to arrive at these figures.

Vehicle Production Milestones[1]

(Cars, Trucks & Buses Combined)

Units	Year
100,000th	1906
1 millionth	1912
10 millionth	1920
50 millionth	1931
100 millionth	1948
150 millionth	1955
200 millionth	1962
250 millionth	1968
300 millionth	1972
400 millionth	1982

Source: Motor Vehicle Manufacturers Association of the U.S., Inc. [1]Based on U.S. total factory sales data.

Automotive Wholesaler Failures

Year	Number	Liabilities	Year	Number	Liabilities
1947	17	456,000	1965	84	$ 4,488,000
1948	26	892,000	1966	98	5,632,000
1949	44	1,150,000	1967	91	9,211,000
1950	55	1,083,000	1968	72	8,411,000
1951	23	330,000	1969	49	7,383,000
1952	22	529,000	1970	61	4,617,000
1953	28	1,010,000	1971	59	8,478,000
1954	39	1,015,000	1972	46	4,452,000
1955	53	1,523,000	1973	55	10,295,000
1956	41	2,699,000	1974	60	7,024,000
1957	45	1,470,000	1975	65	12,122,000
1958	42	1,275,000	1976	57	30,272,000
1959	50	1,744,000	1977	48	27,849,000
1960	77	4,191,000	1978	43	6,270,000
1961	89	3,744,000	1979	36	47,734,000
1962	80	4,696,000	1980	109	47,730,000
1963	74	3,917,000	1981	112	29,682,000
1964	94	3,452,000	1982	60	32,703,000[1]

Source: Business Economics Division, Dun & Bradstreet, Inc. [1]1982 figures are for January through July. Any comparisons to figures from previous years are not valid.

Parts, Service Sales of Franchised New Car Dealerships: $25.1 Billion

	1982	1983	Percent Change
SERVICE LABOR SALES			
Customer Mechanical	$ 3,796,000,000	$ 4,101,000,000	+ 8.0
Customer Body	1,713,000,000	1,801,000,000	+ 5.1
Warranty	1,180,000,000	1,395,000,000	+18.2
Sublet	790,000,000	874,000,000	+10.6
Internal	1,304,000,000	1,447,000,000	+11.0
Other	732,000,000	791,000,000	+ 8.1
TOTAL SERVICE LABOR	9,515,000,000	10,409,000,000	+ 9.4
PARTS SALES			
Customer Mechanical	$ 2,736,000,000	$ 2,998,000,000	+ 9.6
Customer Body	1,703,000,000	1,849,000,000	+ 8.6
Wholesale	4,507,000,000	4,773,000,000	+ 5.9
Counter	1,100,000,000	1,223,000,000	+11.2
Warranty	1,288,000,000	1,591,000,000	+23.5
Internal	1,288,000,000	1,473,000,000	+14.4
Other	791,000,000	825,000,000	+ 4.3
TOTAL PARTS	13,413,000,000	14,733,000,000	+ 9.8
TOTAL SERVICE & PARTS	22,928,000,000	25,142,000,000	+ 9.7

Source: National Automobile Dealers Assn., Industry Analysis Department.

United States Motor Truck Registrations by State

State	Privately Owned[1]		Privately and Publicly Owned[2]	
	1981	1982	1981	1982
Alabama	830,827	814,210	852,841	836,366
Alaska	100,012	110,005	107,148	117,014
Arizona	577,567	615,409	590,376	628,113
Arkansas	552,423	500,738	562,370	510,173
California	3,404,991	3,512,284	3,557,517	3,675,347
Colorado	616,508	634,043	636,461	653,131
Connecticut	128,180	131,386	145,821	149,384
Delaware	74,464	77,347	76,099	79,327
Florida	1,363,380	1,448,417	1,459,147	1,548,800
Georgia	851,199	869,865	888,508	906,766
Hawaii	49,260	50,541	53,483	54,803
Idaho	310,061	324,654	327,394	340,580
Illinois	1,208,221	1,335,112	1,238,516	1,363,491
Indiana	968,143	965,312	993,130	991,055
Iowa	625,090	649,022	645,916	669,914
Kansas	616,068	647,487	632,638	664,382
Kentucky	758,105	769,327	784,304	797,068
Louisiana	807,571	756,593	822,917	772,039
Maine	186,252	189,434	195,851	199,187
Maryland	439,073	446,589	454,215	461,998
Massachusetts	426,311	415,446	452,932	441,795
Michigan	1,081,114	1,163,346	1,141,250	1,224,535
Minnesota	778,912	895,550	806,991	922,955
Mississippi	358,091	362,384	369,378	370,161
Missouri	843,904	847,770	858,025	861,549
Montana	299,670	296,431	308,212	304,560
Nebraska	395,228	396,442	403,767	406,348
Nevada	179,163	184,314	189,736	194,875
New Hampshire	100,443	103,220	108,576	111,436
New Jersey	423,586	436,774	503,687	513,375
New Mexico	345,517	395,490	359,634	409,734
New York	925,133	937,373	990,090	1,000,587
North Carolina	1,054,746	1,065,916	1,095,340	1,107,031
North Dakota	257,206	263,306	264,463	270,456
Ohio	1,274,890	1,244,021	1,315,428	1,286,284
Oklahoma	890,016	950,847	919,014	980,955
Oregon	510,189	580,040	533,108	598,316
Pennsylvania	1,018,591	1,033,728	1,062,383	1,078,473
Rhode Island	71,296	72,255	75,428	77,214
South Carolina	444,359	428,533	459,998	444,376
South Dakota	220,431	225,983	229,701	236,487
Tennessee	620,813	569,447	652,147	603,618
Texas	3,085,800	3,206,475	3,227,429	3,356,546
Utah	322,257	315,302	332,571	325,248
Vermont	73,246	75,741	77,157	79,596
Virginia	577,899	516,591	599,915	539,052
Washington	915,903	901,325	945,328	930,429
West Virginia	370,961	320,465	392,888	345,799
Wisconsin	513,352	558,733	544,101	589,938
Wyoming	185,240	199,435	191,646	206,301
District of Columbia	11,623	11,437	16,135	15,798
TOTAL	3,043,285	33,821,896	34,451,110	35,252,765

Source: U.S. Federal Highway Administration, Table MV-1. [1]Excludes farm trucks registered in certain states and restricted to use in vicinity of owner's farm. There were 57,556 such trucks in the 1982 count. [2]Includes federal, state, county and municipal vehicles; excludes vehicles owned by military services. Note: Registrations shown here are not synonymous with vehicles in use. The latter expression implies a count of vehicles in operation over a period of time. Registrations, by contrast, are a count of transactions (license sales minus transfers eliminated) during a specified period.

Scrappage of Motor Vehicles

(During One-Year Periods Ending June 30)

	Passenger Cars	Trucks	Cars & Trucks
July 1, 1946 - June 30, 1947	478,048	(36,328)	441,720
July 1, 1947 - June 30, 1948	855,517	307,660	1,163,177
July 1, 1948 - June 30, 1949	1,220,041	484,245	1,704,286
July 1, 1949 - June 30, 1950	2,313,813	517,054	2,830,867
July 1, 1950 - June 30, 1951	3,713,417	660,008	4,373,425
July 1, 1951 - June 30, 1952	3,137,989	531,835	3,669,824
July 1, 1952 - June 30, 1953	2,465,936	615,932	3,081,868
July 1, 1953 - June 30, 1954	3,491,000	780,513	4,271,513
July 1, 1954 - June 30, 1955	3,247,436	467,659	3,715,095
July 1, 1955 - June 30, 1956	4,312,759	596,257	4,909,016
July 1, 1956 - June 30, 1957	4,309,153	630,303	4,939,456
July 1, 1957 - June 30, 1958	4,221,607	502,245	4,723,852
July 1, 1958 - June 30, 1959	2,981,641	372,085	3,353,726
July 1, 1959 - June 30, 1960	4,348,719	690,568	5,039,287
July 1, 1960 - June 30, 1961	4,294,118	646,791	4,940,909
July 1, 1961 - June 30, 1962	4,360,774	575,903	4,936,677
July 1, 1962 - June 30, 1963	4,741,017	720,039	5,461,056
July 1, 1963 - June 30, 1964	5,319,286	779,870	6,099,156
July 1, 1964 - June 30, 1965	5,704,373	735,975	6,440,348
July 1, 1965 - June 30, 1966	6,173,512	1,073,593	7,247,105
July 1, 1966 - June 30, 1967	6,984,214	946,649	7,930,863
July 1, 1967 - June 30, 1968	6,200,017	860,542	7,060,559
July 1, 1968 - June 30, 1969	6,348,488	966,003	7,314,491
July 1, 1969 - June 30, 1970	7,460,984	837,173	8,298,157
July 1, 1970 - June 30, 1971	6,021,041	1,043,877	7,064,918
July 1, 1971 - June 30, 1972	7,058,029	1,048,031	8,106,060
July 1, 1972 - June 30, 1973	7,987,384	1,207,536	9,194,920
July 1, 1973 - June 30, 1974	7,193,679	1,047,207	8,240,886
July 1, 1974 - June 30, 1975	5,668,708	907,699	6,576,407
July 1, 1975 - June 30, 1976	6,828,903	1,097,457	7,926,360
July 1, 1976 - June 30, 1977	8,233,925	1,667,653	9,901,578
July 1, 1977 - June 30, 1978	7,907,075	1,426,294	9,333,369
July 1, 1978 - June 30, 1979	9,312,274	1,916,142	11,228,416
July 1, 1979 - June 30, 1980	8,404,993	1,731,670	10,136,663
July 1, 1980 - June 30, 1981	7,542,480	1,518,546	9,061,026
July 1, 1981 - June 30, 1982	6,921,273	1,458,795	8,380,068
July 1, 1982 - June 30, 1983	6,242,544	1,490,971	7,733,515

Source: R. L. Polk & Co., Motor Statistical Division. Note: Adjustments for the absence of Oklahoma and other states have been made where applicable.

Trailer, Truck Tractor Registration

COMMERCIAL TRAILERS[1]

State	Full Trailers	Semi-Trailers	Total Truck Trailers	Truck Tractors[2]	Light Trucks[3]
Alabama	—	45,671	45,671	27,918	705,844
Alaska	6,207	2,046	8,253	1,635	100,464
Arizona	11,718	36,366	48,084	13,660	554,323
Arkansas	—	35,647	35,647	19,883	434,263
California	256,928	261,280	518,208	79,286	2,753,280
Colorado	10,675	26,623	37,298	8,108	555,385
Connecticut	—	21,287	21,287	3,933	110,498
Delaware	28	10,799	10,827	6,113	61,557
Florida	13,985	117,081	131,066	73,948	1,189,843
Georgia	—	66,874	66,874	35,008	765,866
Hawaii	356	1,859	2,215	1,377	44,981
Idaho	3,061	6,915	9,976	7,479	293,172
Illinois	18,692	104,333	123,025	68,197	1,044,390
Indiana	5,058	64,101	69,159	43,681	737,595
Iowa	7,475	44,748	52,223	27,595	535,000
Kansas	15,796	47,312	63,108	21,776	472,065
Kentucky	—	44,214	44,214	15,271	654,387
Louisiana	27,416	145,013	172,429	35,863	648,687
Maine	—	279,224	279,224	5,073	156,782
Maryland	74	25,349	25,423	20,979	325,131
Massachusetts	—	38,350	38,350	19,175	342,312
Michigan	5,289	56,925	62,214	37,274	969,790
Minnesota	45,837	44,260	90,097	31,293	682,380
Mississippi	—	25,966	25,966	9,555	328,366
Missouri	4,797	55,585	60,382	29,317	653,370
Montana	785	4,144	4,929	3,397	273,746
Nebraska	13,123	34,354	47,477	17,534	292,163
Nevada	1,602	2,311	3,913	1,964	172,969
New Hampshire	—	6,487	6,487	3,333	88,505
New Jersey	141	59,185	59,326	30,957	344,939
New Mexico	6,432	14,119	20,551	5,288	367,187
New York	—	39,645	39,645	30,263	766,152
North Carolina	—	58,321	58,321	38,118	900,716
North Dakota	298	13,340	13,638	7,708	170,287
Ohio	11,794	79,184	90,978	67,679	1,042,993
Oklahoma	4,378	70,591	74,969	38,892	826,190
Oregon	20,582	24,006	44,588	17,650	483,537
Pennsylvania	3,055	90,408	93,463	45,853	889,586
Rhode Island	—	6,541	6,541	2,798	58,651
South Carolina	5,062	20,196	35,258	14,828	373,569
South Dakota	963	18,824	19,787	7,087	196,977
Tennessee	—	26,544	25,544	21,235	511,932
Texas	—	249,165	249,165	111,175	2,862,415
Utah	1,386	7,512	8,898	7,239	277,828
Vermont	102	2,684	2,786	1,754	65,659
Virginia	—	49,837	49,837	15,829	409,572
Washington	4,366	114,505	118,871	21,746	778,322
West Virginia	4,418	15,527	19,945	7,187	280,197
Wisconsin	9,206	43,715	52,923	21,134	454,635
Wyoming	4,796	17,250	22,046	8,625	154,620
Dist. of Columbia	—	184	184	119	9,419
Total	525,883	2,676,407	3,202,290	1,192,789	28,172,497

Source: U.S. Federal Highway Administration. Tables MV-9 and MV-11. Figures apply to 1982. [1]The reporting of data on trailer registration varies greatly. Data are reported to the extent available. [2]This column may include some large trucks used regularly in combination with full trailers. [3]This column includes pickups, panels and delivery vans, generally with gross vehicle weight of 10,000 pounds or less. Note: This table excludes publicly-owned vehicles. Registrations shown are not synonymous with vehicles in use since the latter implies a count of vehicles in operation on a specific date or an average for a period of time. Registrations, by contrast, are a count of transactions (with transfers eliminated) during a specific period.